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Accounting Standards and Benchmarks

- Understands and applies basic procedures in the accounting cycle.
- Understands and applies payroll theories and procedures
- Interprets and creates basic financial statements.
- Understands and uses accounting software and spreadsheets.
- Understands the concepts of assets, liabilities and owner's equity.

Level 4 benchmarks (grades 9-12)

Benchmarks 1

Standard 1: Understands and applies basic procedures in the accounting cycle

- Uses the fundamental accounting equation (i.e. assets= liabilities plus owner's equity)
- Understands the rules of debit and credit
- Understands the nature of the double-entry system
- Understands the concepts of accounts receivable and accounts payable

Benchmarks 2

Standard 2: Understands and applies payroll theories and procedures

- Calculates earnings (e.g. at an hourly rate, salary basis, commission basis)
- Calculates deductions (e.g. federal income tax, social security tax, Medicare tax, state income tax)
- Calculates employer's payroll taxes (e.g. social security, Medicare, federal, unemployment, state unemployment)
- Prepares payroll reports (e.g. federal, state, local)
- Understands the relationship between gross pay, net pay, and deductions (i.e., net pay=gross pay less deductions)

Benchmarks 3

Standard 3: Interprets and creates basic financial statements

- Understands interrelationships of financial statements
- Prepares balance sheets (e.g., balance total assets with total liabilities plus net worth)
- Calculates financial ratios (e.g., gross profit, net profit, equity, debt ratios, ratios of expenses to sales; rates of turnover of inventories)
- Prepares income statements (e.g. add gross sales/gross billings and cost of goods sold, determine gross profit on sales, deduct expenses, record net profit)
- Prepares trial balances (i.e. summaries of ledger account balances used to check the arithmetical accuracy of ledgers)
- Uses a variety of journal formats to journalize business

Benchmark 4

Standard 4: Understands and uses accounting software and spreadsheets

- Uses spreadsheet technology to prepare financial statements and reports (including charts and graphs)
- Uses spreadsheets and databases to determine price, profit, cost, and break-even point
- Uses accounting software to compare planned financial goals to actual financial statements
- Uses financial spreadsheets or accounting software for budget analysis and forecasting
- Knows various accounting software available for financial analysis and management (e.g. programs pertaining to productivity, payroll, investments, inventory control, ratio analysis)

Benchmark 5

Standard 5: Understands the concepts of assets, liabilities, and owner's equity

- Uses common methods of computing depreciation (e.g., straight-line methods, declining-balance method, sum-of-the-year-digits method)
- Understands the concept of profit and the computation of the break-even point for a business (i.e., total fixed costs)
- Understands the difference between currents assets expected to be converted into cash within 12 months, such as cash or merchandise, fixed assets, and intangible assets (e.g. reputation of servicing the public, franchise fees, patents, copyrights)
- Understands the concept of liabilities (i.e. debts incurred by the business to acquire assets)
- Understands the difference between current liabilities (i.e. an obligation that will be paid by a current asset) and long-term liabilities (i.e. debts that are due after 12 months of maturity) and their impact on financial statements
- Understands appropriate accounting techniques used to account for investments and withdrawals by owners
- Understands the concept of dividends
- Understands the differences between manual and computerized accounting systems

Agriculture Department Standards and Benchmarks

Ag Metals

<u>Standard AM-1</u>: Understand problem solving, analysis, and decision-making in agriculture.

Benchmark: Analyze situation, use problem-solving approach and make appropriate decisions.

- Differentiate between cast iron, metallic arc, gas tungsten, TIG, oxygen/acetylene welding including the selection of equipment and supplies
- Compare types of drives, used in agricultural machinery
- Sketch a simple line drawing of a three dimensional object showing top, bottom, and front views

Standard AM-2: Understand leadership and ethics development in agriculture.

Benchmark: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Take responsibility for mistake and/or good work
- Become personally involved in a professional organization
- Manage time effectively
- Demonstrate initiative

<u>Standard AM-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills

- Facilitate group interactions (teamwork)
- Follow rules and regulations
- Work effectively with others
- Respect the property of others
- Follow directions
- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by a supervisor
- Cooperate with others
- Interact with others in a courteous and tactful manner
- Develop positive community relations
- Accept supervision willingly

- Ask for help when needed
- Explain the relationship between public and private sectors

<u>Standard CT-4</u>: Understand the use of entrepreneurial knowledge and skills in agriculture.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Explain the concept of competition
- Analyze the concept of supply and demand
- Explain the concept of organized labor and business
- Explain the concept of profit

<u>Standard CT-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Develop a bill of materials and projected cost list
- Interpret and follow recommended service and maintenance schedules using operator manuals
- Handle hazardous chemicals and flammable materials according to product label
- Utilize service or cooperator manuals, and catalogs to complete a job
- Explain the terms compression ratio, and piston displacement
- Speak effectively in front of others
- Organize thoughts and write clearly
- Listen effectively

<u>Standard CT-6</u>: Understand the principles of goal setting personal and organizational

Benchmark: Explain the goal setting process

- Prioritize a series of tasks
- Define goals

<u>Standard CT-7</u>: Understand the principles of planning.

Benchmark: Apply planning strategies in agriculture mechanics

- Interpret plans and working drawings
- Complete a simple construction project of good quality
- Work within guidelines
- Utilize time effectively
- Organize an event

<u>Standard CT-8</u>: Understand the concept of adapting to change in agriculture

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture

- Identify common applications of agricultural machinery and major trends in technology
- Adapt to environment/situation
- Accept new changes
- Adapt to change/demonstrate flexibility

Standard CT-9: Understand global and cultural diversity issues

Benchmark: Demonstrate a working knowledge of the relationship between global/diversity and occupational success in agriculture

- Accept individual differences
- Explain the nature of international trade

Standard CT-10: Understand basic computational and informational technology

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems

- Demonstrate adjustment or calibrations seeding, fertilizing, spraying, harvesting, tillage, or processing machinery
- Demonstrate proper measurement and layout mechanics project
- Calculate board fee, square feet, and linear foot of lumber or metal
- Use basic computer functions or word processing, spreadsheet, and database management
- Calculate the volume of concrete to be ordered based on a design plan
- Describe basic hardware components
- Use the following hardware components: keyboard, mouse, disk drive, monitor
- Describe basic hardware components
- Use the following hardware components: keyboard, mouse, disk drive, monitor

<u>Standard CT-11:</u> Understand the concept of career development and improvement-lifelong learning.

Benchmark: Develop strategies to make a successful transition from work to school. Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture

- Recognize the importance of technical assistance
- Explain types of business ownership

<u>Standard AM-5</u>: Understand the use of communications skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Develop a bill of materials and projected cost list
- Interpret and follow recommended service and maintenance schedules using operators manuals
- Handle hazardous chemicals and flammable materials according to product label
- Utilize service or cooperators manuals, and catalogs to complete a job
- Speak effectively in front of others
- Listen effectively
- Organize thoughts and clearly express point of view

<u>Standard AM-6</u>: Understand the principles of goal setting personal and organizational

Benchmark: Explain the goal setting process

- Prioritize a series of tasks
- Define goals

Standard AM-7: Understand the principles of planning

Benchmark: Apply planning strategies in agriculture mechanics

- Interpret plans and working drawings
- Complete a simple construction project of good quality
- Work within guidelines
- Utilize time effectively

Standard AM-8: Understand the concept of adapting to change in agriculture

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

- Adapt to environment/situation
- Accept new challenges
- Adapt to change/demonstrate flexibility

<u>Standard AM-9</u>: Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational success in agriculture.

• Accept individual differences

• Explain the nature of international trade

Standard AM-10: Understand basic computational and informational technology

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems

• Demonstrate proper measurement and layout of mechanics project

Standard AM-11: Understand the concept of career development and improvement-lifelong learning.

Benchmark: Develop strategies to make a successful transition from school to work

- Demonstrate punctuality
- Produce quality work
- Exhibit dependability/responsibility on the job

<u>Standard AM-12</u>: Understand basic technical skills and knowledge in the occupational area of agricultural mechanics

Benchmark: Apply technical skills in a hands-on experiential setting in agriculture

- Demonstrate work with electricity in a safe manner
- Perform routine care, maintenance and perform tune-up of a gasoline engine
- Describe basic principles of electricity and define electrical related terminology
- Set up and maintain equipment, cut a hole, straight line, and bevel on flat mild steel using a gas torch and/or plasma cutter
- List the advantages of brazing and complete a braze weld using gas welding equipment
- Describe ingredients and mixes of high quality concrete
- Describe characteristics of a quality weld
- Explain arc, braze, and wire fed welding terms and principles
- Set up equipment, prepare metal and complete corner, fillet, lap and butt welds on mild steel in various positions with wire fed braze and are welders
- List the advantages of brazing and complete a braze weld using gas welding equipment
- Describe ingredients and mixed of high quality concrete
- Describe characteristics of a quality weld
- Explain arc, braze and wire fed welding terms and principles
- Set up equipment, prepare metal and complete corner, fillet, lap and butt welds on mild steel positions with wire fed braze and arc welders
- Maintain clean and orderly work area
- Select fuels, lubricants, hydraulic fluids and filters by service classifications
- Perform a four-stroke or two-stroke cycle engine overhaul

Westwood Community Schools Standards and Benchmarks **Small Engines**

<u>Standard SE-1</u>: Understand problem solving, analysis, and decision-making in agriculture.

Benchmark: Analyze situation, use problem-solving approach and make appropriate decisions.

- Compare types of drives, used in agricultural machinery
- Sketch a simple line drawing of a three dimensional object showing top, bottom, and front views

<u>Standard SE-2</u>: Understand leadership and ethics development in agriculture.

Benchmark: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Take responsibility for mistakes and/or good work
- Manage time effectively
- Demonstrate initiative

<u>Standard SE-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills.

- Follow rule and regulations
- Work effectively with others
- Respect the property of others
- Follow directions
- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by a supervisor
- Cooperate with others
- Interact with others in a courteous and tactful manner
- Develop positive community relations
- Accept supervision willingly
- Ask for help when needed
- Explain the relationship between public and private sectors

<u>Standard SE-4</u>: Understand the use of entrepreneurial knowledge and skills in agriculture.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Interpret and follow recommended service and maintenance schedules using operator manuals
- Handle hazardous chemicals and flammable materials according to product label
- Utilize service or cooperators manuals and catalogs to complete a job

- Explain the terms compressions ratio, and piston displacement
- Speak effectively in front of others
- Organize thoughts and write clearly
- Listen effectively
- Lead a discussion

<u>Standard SE-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Interpret and follow recommended service and maintenance schedules using operators manuals
- Handle hazardous chemicals and flammable materials according to product label
- Utilize service or cooperators manuals, and catalogs to complete a job
- Explain the terms compression ratio, and piston placement
- Speak effectively in front of others
- Organize thoughts and write clearly
- Listen effectively
- Lead a discussion

<u>Standard SE-6</u>: Understand the principles of goal setting personal and organizational.

Benchmark: Explain the goal setting process.

- Prioritize a series of tasks
- Define goals

<u>Standard SE-7:</u> Understand the principles of planning.

Benchmark: Apply planning strategies in agriculture mechanics

- Interpret plans and working drawings
- Complete a simple construction project of good quality
- Work within guidelines
- Utilize time effectively
- Organize an event

<u>Standard SE-8</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

- Identify common applications of agriculture machinery and major trends in technology
- Adapt to environment/situation

- Accept new challenges
- Adapt to change/demonstrate flexibility

Standard SE-9: Understand global and cultural diversity issues

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational success in agriculture.

• Accept individual differences

<u>Standard SE-10</u>: Understand basic computational and informational technology.

Benchmark: Develop strategies to make a successful transition from school to work.

• Describe basic hardware components

<u>Standard SE-11</u>: Understand the concept of career development and improvement of lifelong learning

Benchmark: Develop strategies to make a successful transition from school to work.

- Demonstrate punctuality
- Produce quality work
- Describe career opportunities in various areas of agricultural mechanics
- Identify skills, physical, and emotional requirements for a job

<u>Standard SE-12</u>: Understand basic technical skills and knowledge in the occupational area of agricultural mechanics

Benchmark: Apply technical skills in a hand-on experiential setting in agriculture.

- Demonstrate work with electricity in a safe manner
- Identify factors for selecting motors and protection devices based upon types of application
- Explain he function and operating principles of two-stroke and four-stroke gasoline diesel engine systems
- Perform routine care, maintenance and perform tune-ups of a gasoline engine
- Maintain clean and orderly work area

Natural Resources

<u>Standard NR-1</u>: Understand problem solving, analysis, and decision-making in agriculture.

Benchmark: Analyze situation, use problem-solving approach and make appropriate decisions.

• Evaluate alternative solutions to Iowa air pollution problems

- Evaluate benefits and uses of native plants and animals, as well as their negative uses.
- Explain the role of test plots in evaluating agricultural management practices
- Evaluate alternative agricultural systems based on productivity, profitablility, environmental considerations, and social acceptance
- Evaluate means of solving local wildlife resource problems
- Evaluate and incorporate alternative fuel resources
- Determine soil amendments necessary based on soil tests, realistic yield goals, and the fertility level of a given piece of land
- Identify and evaluate conservation tillage systems and their productivity, profitability and environmental impact
- Evaluate means of solving local water resource problems
- Collecting, understanding, and analyzing samples to assess water quality and analyze findings
- Evaluate various solid waste disposal systems by their environmental impact
- Evaluate means of solving Iowa forest resource problems

<u>Standard NR-2</u>: Understand leadership and ethics development in agriculture.

Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Manage time effectively
- Become personally involved in a professional organization
- Delegate duties
- Take responsibility for mistakes and/or good work
- Recognize relevant, ethical issues in business
- Demonstrate initiative

<u>Standard NR-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills.

- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by a supervisor
- Interact with others in a courteous and tactful manner
- Cooperate with others
- Respect the property of others
- Explain the relationship between public and private sectors
- Work effectively with others
- Follow rules and regulations
- Accept supervision willingly
- Facilitate group interactions (teamwork)
- Follow directions
- Ask for help when needed
- Develop positive community relations

Westwood Community Schools Standards and Benchmarks <u>Standard NR-4</u>: Understand the use of entrepreneurial skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Write a legal description of a selected piece of land
- Listen effectively
- Organize thoughts and clearly express point of view
- Organize thoughts and write clearly
- Lead a discussion
- Speak effectively in front of others

<u>Standard NR-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Write legal description of a selected piece of land
- Listen effectively
- Organize thoughts and clearly express point of view
- Organize thoughts and write clearly
- Lead a discussion
- Speak effectively in front of others

<u>Standard NR-6</u>: Understand the principles of goal setting-personal and organizational.

Benchmark: Explain the goal setting process.

- Define goals
- Prioritize a series of tasks

<u>Standard NR-7</u>: Understand the principles of planning.

Benchmark: Apply planning strategies in natural resources management.

- Develop an individual resource conservation plan to include crop, pasture, woodlands, wildlife, farmstead, and urban considerations
- Identify the role geologic resources have in land use planning
- Develop a wildlife management plan for a given area
- Utilize time effectively
- Organize an event
- Develop plans which incorporate the use of federal, state and local agriculture programs to sustain resources (i.e. buffer strips)
- Work within guidelines

<u>Standard NR-8</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

- Identify contemporary natural resources issues/concerns relating to agriculture
- Adapt to environment/situation
- Accept new challenges
- Adapt to change/demonstrate flexibility

<u>Standard NR-9</u>: Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge or the relationship between global/cultural diversity and occupational success in agriculture.

- Describe global environment impact
- Explain global positioning systems and graphic information systems and understand practice application
- Accept individual differences

Standard NR-10: Understand basic computational and informational technology.

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems.

- Estimate water needs for a community and farm operation
- Measure and calculate land area, length and percent slope
- Demonstrate general computer literacy, word processing, information gathering, and database operation
- Show awareness of various forms of electronic communication-mail, ftp
- Worldwide web
- Describe basic hardware components
- Use an operating system to: open or chose programs, list files, or program and file

<u>Standard NR-11</u>: Understand the concept of career development and improvement lifelong learning.

Benchmark: Development strategies to make a successful transition from school to work.

- Identify a minimum of five (5) environmental and natural resource occupations and explain the job requirements, major activities performed by persons in these occupations and availability by location
- Explain the connection between the natural resources occupations, agribusiness, and technology
- Evaluate job offers, benefits, time and working environment
- Demonstrate personal hygiene and cleanliness
- Identify skills, physical and emotional requirements for a job

- Exhibit dependability/responsibility on the job
- Demonstrate punctuality
- Produce quality work

<u>Standard NR-12</u>: Understand basic technical skills and knowledge in the occupational area of natural resources.

Benchmark: Apply technical skills in a hands-on experimental setting in agriculture

- Explain the economic impact of the loss of wildlife, habitat, urban sprawl, and navigation on wildlife resources
- Identify the agricultural impact of groundwater resource availability, management and use
- Select alternative grazing practices to eliminate grazing of woodlands
- Identify alternative forest management practices that reduce high grading of timber harvest
- Describe the connections between land use, rural Iowa, and agriculture
- Locate a plot of land given a legal description
- Explain basic soil morphology and its relationship to management
- Explain the impact agriculture, industry, and population centers have on natural resources and the environment
- Use soil survey, topography maps, aerial photos, and other natural resources inventories to interpret, compare (limits and potentials) and plan wise land management
- Identify types of hunting leases and liability involved
- Determine crops and crop management that will provide habitat for wildlife
- Perform wildlife habitat improvements, be knowledgeable of wildlife habitat technologies
- Identify a minimum of 30 Iowa wildlife species to include game, non-game and endangered species
- Explain a minimum of five timber stand improvement practices
- Identify woodland changes caused by pests and fire
- Explain important principals and economic values in managing trees for wood products, Christmas tree production, wildlife, recreation, windbreak, water recycling, air pollution and energy
- Identify a minimum of fifteen (15) Iowa tree species and their common uses and planting objectives
- Demonstrate the proper planting of a tree based on soil conditions, size conditions, and land use objectives
- Describe how Iowa climate and weather is relevant to natural resources and agricultural resource management
- Identify techniques for improvement of aquatic habitats
- Identify a minimum of ten aquatic animals common to Iowa
- Select appropriate conservation practices that will reduce erosion and improve water quality on a farm and urban area

- Describe the types of wind and water erosion and determine soil erosion rates and resulting economic and environmental losses to society
- Explain the principles of integrate crop (fertility levels, pests) management
- Explain the technique of crop cultivation and how they interrelate with the environment
- Explain the importance of protecting ground and surface water resources
- Explain proper stocking and management techniques and regulations
- Describe current animal waste regulations as they apply to the environment
- Explain State and Federal Ag and Natural Resource Management Agencies and their functions
- Explain the hydrologic cycle
- Identify local sources of ground and surface water contaminations and explain techniques for protecting these resources
- Identify and incorporate nutrient management practices including spreading lagoon fertilizers, commercial applicator training, composing of manure and animal carcasses, managing wastes from food processing facilities through composting, developing manure management plans, the application of municipal sludge, and the storage, handling, and transfer of chemicals into agricultural plans
- Identify BMPs (Best Management Practices) for the management of vehicular wastes (i.e., oil antifreeze, lead batteries, tires, etc.)
- Incorporate wildlife depredation prevention into animal husbandry practices
- Maintain clean and orderly work area

Animal Science

<u>Standard AP-1:</u> Understand problem solving, analysis, and decision-making in agriculture.

Benchmarks: Analyze situation, use problem-solving approach and make appropriate decisions.

- Analyze the economic impact of production agriculture on the economy
- Identify and compare the operation of equipment and facilities involved with livestock for optimum production efficiency
- Recognize the use of electronic ID system in decision-making
- Describe the value of computerized record keeping for decision-making

<u>Standard AP-2</u>: Understand leadership and ethics development in agriculture.

Benchmark: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Recognize relevant, ethical issues in business
- Demonstrate initiative
- Delegate duties
- Take responsibility for mistakes and/or good work

• Manage time effectively

<u>Standard AP-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills.

- Identify the impact of positive community relations through communications, business appearance and practices in addition to personal involvement in related professional organizations
- Respect the property of others
- Follow directions
- Interact with others in a courteous and tactful manner
- Cooperate with others
- Work effectively with others
- Facilitate group interaction (teamwork)
- Explain the relationship between public and private sectors
- Follow rules and regulations
- Accept supervision willingly
- Develop positive community relationship
- Ask for help when needed
- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by supervisor

<u>Standard AP-4</u>: Understand the use of entrepreneurial knowledge and skills in agriculture.

Benchmark: Use appropriate communication skills in a variety of occupations situations in agriculture.

- Analyze present and future business resource base.
- Identify necessary financial components for production agricultural business
- Identify risk components and analyze management strategies
- Develop and implement a business plan for crop/animal production
- Explain the concept of competition
- Analyze the concept of supply and demand
- Explain the concept of profit

<u>Standard AP-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Lead a discussion
- Speak effectively in front of others
- Listen effectively
- Organize thoughts and clearly express point of view

• Organize thoughts and write clearly

Standard AP-6: Understand the principles of goal setting-personal and organizational

Benchmark: Apply planning strategies in agriculture production.

- Analyze components involved in contracting services for the product of an agricultural business
- Identify components needed for appropriate tax information
- Determine marketing systems, methods, and strategies
- Plan an animal health program/schedule
- Prioritize a series of tasks
- Utilize time effectively
- Organize an event
- Recognize the importance of technical assistance
- Work within guidelines

<u>Standard AP-8</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

- Adapt to change/demonstrate flexibility
- Accept new challenges
- Utilize past, current and future trends to analyze and interpret charts, graphs and other information to develop management decisions
- Adapt to environment/situation

<u>Standard AP-9</u>: Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational successes in agriculture.

- Explain the nature of international trade
- Identify domestic and global niche markets and analyze the production requirements
- Accept individual difference

<u>Standard AP-10</u>: Understand basic computational and informational technology.

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems.

• Evaluate and demonstrate use of current technology in land surveying and measuring

<u>Standard AP-11</u>: Understand the concept of career development and improvement (lifelong learning).

Benchmark: Develop strategies to make a successful transition from school to work.

- Identify career opportunities in production agriculture
- Complete the course work for current and evolving certification or licensure requirements in production agriculture
- Identify skills, physical and emotional requirements for a job
- Evaluate job offer, benefits, time and working environment
- Exhibit dependability and responsibility on the job
- Demonstrate punctuality
- Demonstrate personal hygiene and cleanliness
- Produce quality work

<u>Standard AP-12</u>: Understand basic technical skills and knowledge in the occupational area of production agriculture.

Benchmark K: Apply technical skills in a hands-on experiential setting in agriculture

- Explain practices to ensure food safety for the consumer
- Follow procedures in identification, handling and disposal of hazardous materials
- Identify basic laws and government regulations related to agricultural production
- Analyze the environmental effect that agricultural stewardship may have on surface and ground water, wildlife, soil, air and people
- Demonstrate safe and humane animal handling techniques
- Identify major genetic characteristics of animal breeds and plant varieties
- Evaluate agricultural product quality
- Demonstrate knowledge of safe and proper operation of tools and equipment
- Evaluate various animal feeding programs including ration development and feedstuff analysis
- Plan an animal health program/schedule with emphasis toward quality assurance
- Identify major genetic characteristics of animal breeds (including hybrids) and examine their uses in animal breeding systems and scientific principles
- Identify and demonstrate plant growth and reproduction
- Identify and select biological and chemical pest controls for agronomic production
- Design storage establishment improvement practices/grazing systems
- Identify and compare the operation of grain harvesting, handling, drying, and storage systems
- Maintain clean and orderly work area
- Show awareness of the tools of precision farming
- Describe the importance of graphic information systems in precision farming
- Describe the importance of graphic information systems in precision farming
- Describe the role of graphic information systems in precision farming
- Describe the value of precision farming in agriculture
- Use the graphic information system receiver to record a coordinate position of some point

- Use the survey plat of township, range and section to describe an area
- Define precision farming in agriculture
- Use the graphic information system receiver to record a coordinate position of some point
- Use the survey plat of township, range, and section to describe an area
- Define precision farming
- List specific biotechnology products in use
- Recognize the concept of DNA
- Describe the role DNA plays in an animal's phenotype
- Define phenotype and genotype
- Show awareness of processes of biotechnology: fingerprinting, transformation, and extraction
- Use email to send a message

Horticulture

<u>Standard H-1</u>: Understand problem solving, analysis, and decision-making in agriculture.

Benchmark: Analyze situation, use problem-solving approach and make appropriate decisions.

- Identify and differentiate between *may be a combination of) disease damage, pest and insect damage, chemical and environmental damage in a plant
- Use observational techniques to identify healthy, quality plants
- Choose an appropriate plant for a specific location in a home or business
- Choose plants of appropriate mature size, shape, texture, and function for a given site
- Interpret landscape plans
- Adjust or control closed environmental factors; water, heat, cold, humidity, air circulation, and ventilation

Standard H-2: Understand leadership and ethics development in agriculture.

Benchmark: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Manage conflict (personal and customer)
- Become personally involved in a professional organization
- Manage time effectively
- Recognize relevant, ethical issues in business
- Take responsibility for mistakes and/or good work
- Demonstrate initiative
- Delegate duties

<u>Standard H-3:</u> Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills.

- Accept supervision willingly
- Facilitate group interactions (teamwork)
- Ask for help when needed
- Follow directions
- Interact with others in a courteous an tactful manner
- Cooperate with others
- Follow rules and regulations
- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by a supervisor
- Work effectively with others
- Develop positive community relations
- Respect the property of others

<u>Standard H-4</u>: Understand the use of entrepreneurial knowledge and skills in agriculture.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Recognize the importance of technical assistance
- Analyze the concept of supply and demand

<u>Standard H-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Explain process of and reasons for pasteurization and fumigation of soil mixes
- Explain growth-regulating chemicals
- Listen effectively
- Lead a discussion
- Speak effectively in front of others

<u>Standard H-6</u>: Understand the principles of goal setting-personal and organizational.

Benchmark: Explain the goal setting process.

• Define goals

<u>Standard H-7</u>: Understand the principles of planning.

Benchmark: Apply planning strategies in horticulture.

- Plan planting schedules
- Identify basic inventory procedures and techniques
- Organize an event
- Use drafting techniques to draw a basic plan to scale
- Develop a planting plan
- Prepare, design and plant a dish garden
- Develop a vegetable garden plan
- Utilize time effectively
- Design and construct fresh floral arrangement
- Work within quidelines
- Prioritize a series of tasks

<u>Standard H-8</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

- Adapt to change/demonstrate flexibility
- Accept new challenges
- Identify issues and trends in horticulture concerning environmental and conservation problems
- Explain current/future trends in horticulture
- Adapt to environment/situation

<u>Standard H-9:</u> Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational success in agriculture.

- Accept individual differences
- Explain the nature of international trade

Standard H-10: Understand basic computational and informational technology.

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems.

- Use standard units of measurement accurately in the various areas of horticulture.
- Make change properly

<u>Standard H-11</u>: Understand the concept of career development and improvement lifelong learning.

Benchmark: Develop strategies to make a successful transition from school to work.

- Identify skills, physical and emotional requirement for a job
- Complete required forms

- Construct an application letter
- Evaluate job offer, benefits, time and working environment
- Exhibit dependability/responsibility on the job
- Demonstrate punctuality
- Produce quality work
- Demonstrate personal hygiene and cleanliness
- Identify career opportunities in the horticulture industry

<u>Standard H-12</u>: Understand basic technical skills and knowledge in the occupational area of Horticulture.

Benchmark: Apply technical skills in a hands-on experiential setting in agriculture.

- Fertilize media/soil. Prepare plant media
- Take soil samples
- Produce, harvest, and store greenhouse crops
- Maintain houseplants
- Apply nutrients, soil amendments, by preparing a compost pile
- Prepare/plat seeds/label plants
- Identify growing structures utilized in horticulture
- Perform basic maintenance practices on gasoline and diesel engines
- Maintain large and small tools and implements
- Use proper equipment in all aspects of horticulture
- Use correct horticulture terminology
- Identify common weeds
- Identify floriculture crops including houseplants by common name
- Identify Midwestern fruits and nuts by common name
- Identify vegetables and herbs by common name
- Explain the propagation of plants by budding, grafting, and tissue culture techniques
- Maintain clean and orderly work area
- Install landscape material
- Identify different landscape structures and the materials used in the construction
- Prepare site and install sod and/or seed
- Force bulbs (control temperature, moisture, and light)
- Identify plants using a botanical key
- Identify herbaceous and woody ornamental plants by common name
- Explain the process of producing, harvesting, and storing ornamental plants (i.e. trees, shrubs, Christmas trees, and perennials)
- Prepare planting media
- Prepare/ plant bulbs, corms, tubers, rhizomes and roots
- Prepare/transplant seedlings, cuttings and daughter plants

- Prepare/transplant trees, shrubs and herbaceous perennials for container production
- Prune or shear plants and trees in an appropriate manner
- Identify Midwestern turf grasses by common name
- Observe commercial and residential irrigation systems
- Identify soil types for their fruit and vegetable production characteristics
- Prepare/transplant seedlings, cuttings, and daughter plants
- Construct bows using basic ribbon width
- Construct different types of body flowers
- Construct floral design using holiday greens
- Package florist flowers/arrangements for delivery
- Demonstrate the construction of a wedding or funeral design
- Properly care for and prepare fresh cut plant materials for use in floral design
- Prepare a green or flowering plant for sale
- Define production practices for greenhouse pot crops
- Identify common tools and mechanics used in arranging flowers
- Identify the types of flowers/greens that ban be used in floral design
- Identify the basic principles of floral design
- Perform basic wiring and taping techniques
- Explain how to set up a maintenance schedule
- Explain the process of photosynthesis
- Explain factors affecting plant growth; light, water, temperature, humidity, nutrients (micro/macro) soils, atmosphere, and pollutants
- Explain the nutrients of nutrients uptake
- Define and identify hardiness zones
- Explain the system of scientific nomenclature for plants (e.g., families, genus, species)
- Explain plant propagation from seed, cuttings, divisions, and layering
- Explain how to safely mix, apply, store, transport and dispose of chemicals and chemical containers
- Explain and demonstrate first aid practices when using chemicals
- Explain the principles of aerating turf
- Explain the process of producing, harvesting and storing greenhouse crops
- Explain the process of maintaining orchards and vineyards and storing of fruit and vegetables
- Explain the use of a scale, cash register, and charge car authorization system
- Explain lawn and turf maintenance
- Explain the basic principles of landscape design
- Explain the principles of integrated pest management

Westwood Community Schools Standards and Benchmarks Introduction to Agriculture/Ag Production

Ag Business/Ag Sales

<u>Standard APP-1</u>: Understand problem solving, analysis, and decision-making in agriculture.

Benchmarks: Analyze situation, use problem-solving approach and make appropriate decisions

- Analyze the economic impact of production agriculture on the economy
- Identify and compare the operation of equipment and facilities involved with livestock for optimum production efficiency

<u>Standard APP-2</u>: Understand leadership and ethics development in agriculture.

Benchmarks: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Recognize relevant, ethical issues in business
- Demonstrate initiative
- Analyze components of labor management
- Delegate duties
- Become personally involved in a professional organization
- Take responsibility for mistakes and/or good work
- Manage time effectively

<u>Standard APP-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills.

- Respect the property of others
- Follow directions
- Interact with others in a courteous and tactful manner
- Cooperate with others
- Facilitate group interaction (teamwork)
- Explain the relationship between public and private sectors
- Follow rules and regulations
- Accept supervision willingly
- Develop positive community relations
- Ask for help when needed
- Comply safety and health rules

<u>Standard APP-4</u>: Understand the use of entrepreneurial knowledge and skills in agriculture.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Explain types of business ownership
- Demonstrate the ability of market analysis
- Identify necessary financial components for a production agricultural business
- Explain the concept of competition
- Analyze the concept of supply and demand
- Identify skills required of a business owned

<u>Standard APP-5</u>: Understand the use of communication skills in agriculture interpersonal and group; written and oral.

Benchmark: Use appropriate communication skills in a variety of occupational situations in agriculture.

- Lead a discussion
- Speak effectively in front of others
- Listen effectively
- Organize thoughts and clearly express point of view
- Organize thoughts and write clearly
- Demonstrate proper telephone etiquette

<u>Standard APP-6</u>: Understand the principles of goal setting-personal and organizational

Benchmark: Explain the goal setting process

- Define goals
- Determine personal attitude toward business risk

<u>Standard APP-7</u>: Understand the principles of planning.

Benchmark: Apply planning strategies in agriculture production.

- Analyze components involved in contracting services for the product of an agricultural business
- Determine marketing systems, methods, and strategies
- Prioritize a series of tasks
- Utilize time effectively
- Organize an event
- Recognize the importance of technical assistance
- Work within guidelines

<u>Standard APP-8</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situations and rapid changes in agriculture.

• Adapt to change/demonstrate flexibility

- Accept new challenges
- Utilize past, current and future trends to analyze and interpret charts, graphs and other information to develop management decisions
- Adapt to environment/situation

<u>Standard APP-9</u>: Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational success in agriculture.

- Explain the nature of international trade
- Identify domestic and global niche markets and analyze the production requirements
- Accept individual differences

<u>Standard APP-10</u>: Understand basic computational and informational technology.

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems.

- Evaluate and demonstrate use of current technology in land surveying and measuring.
- Utilize digitized soil surveys to establish a soil sampling methods and formulate a nutrient
- Utilize computerized record analyze in making production, management and marketing decisions
- Explain the operating system of a computer

<u>Standard APP-11</u>: Understand the concept of career development and improvement (lifelong learning).

Benchmark: Develop strategies to make a successful transition from school to work.

- Identify career opportunities in production agriculture
- Indentify skills, physical and emotional requirements for a job
- Complete required forms
- Construct an application letter
- Evaluate job offers, benefits, time and working environment
- Exhibit dependability and responsibility on the job
- Demonstrate punctuality
- Compose a resume
- Demonstrate personal hygiene and cleanliness
- Produce quality work

<u>Standard APP-12</u>: Understand basic technical skills and knowledge in the occupational area of production agriculture.

Benchmark: Apply technical skills in a hands-on experiential setting in agriculture.

- Explain practices to ensure food safety for the consumer
- Follow procedures in identification, handling and disposal of hazardous materials
- Demonstrate safe and humane animal handling techniques
- Identify major genetic characteristics of animal breeds and plant varieties
- Identify components of water systems
- Demonstrate knowledge of safe and proper operation of tools and equipment
- Demonstrate carpentry skills needed in agriculture
- Demonstrate welding and cutting skills
- Demonstrate and calculation, forming, placing, and finishing of concrete
- Describe the value of precision farming in agriculture
- Use the graphic information system receiver to record a coordinate position of some point
- List specific objects that can be mapped
- Recognize what a coordinate system is
- Use the survey plat of township, range and section to describe an area
- Define precision farming
- List specific biotechnology products in use
- Define phenotype and genotype
- Show awareness of processes of biotechnology: fingerprinting, transformation and extraction
- Use e-mail to send a message
- Use the worldwide web to find information

<u>Standard APP-13</u>: Understand the concept of adapting to change in agriculture.

Benchmark: Develop strategies to effectively adapt to new situation and rapid changes in agriculture.

- Explain how trends in convenience buying have impacted processing and packaging
- Accept new challenges
- Adapt to environment/situation
- Adapt to change/demonstrate flexibility

<u>Standard APP-14</u>: Understand global and cultural diversity issues.

Benchmark: Demonstrate a working knowledge of the relationship between global/cultural diversity and occupational success in agriculture.

- Explain the impact global international markets have on products and processing
- Analyze the food distribution system in the U.S. and other nations
- Accept individual differences
- Demonstrate the use of the various measuring systems used in the U.S. and in other countries, and explain the benefits and show conversations of the various measuring systems
- Explain the nature of international trade

<u>Standard APP-15</u>: Understand basic computational and informational technology.

Benchmark: Apply computational and informational technologies to analyze and solve mathematical problems.

- Use basic addition, subtraction, multiplication and division to formulate agricultural products for processing and/or packaging
- Demonstrate computer skills for business applications (i.e., spreadsheets, Internet, information management, word processing)

<u>Standard APP-16</u>: Understand the concept of career development and improvement lifelong learning.

Benchmark: Develop strategies to make a successful transition from school to work.

- Identify skills, physical and emotional requirements for a job
- Identify the skills needed to become a productive and efficient worker in a production, processing, or distribution business
- Identify occupational opportunities available to the area of agricultural products and processing
- Demonstrate personal hygiene and cleanliness
- Exhibit dependability/responsibility on the job
- Compose a resume
- Demonstrate punctuality
- Produce quality work

<u>Standard APP-17</u>: Understand basic technical skills and knowledge in the occupational area of agricultural products and processing.

Benchmark: Apply technical skills in a hands-on experiential setting in agriculture.

- Identify geographic areas where and why product processing occurs
- Identify the use of chemicals and biological agents that affect agricultural processing
- Identify packaging methods of agricultural products and their impact on quality and distribution
- Identify the various agricultural products produced and processed in Iowa (i.e., fruits and vegetables, grains, meat, dairy, etc.)
- Identify the various agricultural processing methods for agricultural products (i.e., irradiation, dried, frozen, thermo, fresh, vacuum sealed, canned, juices, etc.)
- Identify how genetically altered agricultural products affect the marketing of those agricultural products
- Demonstrate methods for storing and monitoring agricultural products (i.e., drying corn, moisture testing, insect damage, etc.)
- Describe quality factors for agricultural products (i.e., meats, grains, fiber, fruits, and vegetables, etc.)

- Describe how health concerns, consumer issues, and political groups impact products
- Identify governmental agencies and structure regulating food products
- Identify the parts of plants and animals used in processed food and fiber products

Art Standards and Benchmarks

(Curriculum coding interpretation: Standard. Grade (span) level or course. <u>Benchmark</u>. Grade Level Expectations Achievement Standards: 1-Proficient 2-Progressing 3-Advanced

- **1.** The students will acquire an understanding of and application of media, techniques, and processes.
- 1.K-4.1 Differences between materials, techniques, and processes
- 1.K-4.2 Describe how different materials, techniques, and processes cause different responses
- 1.K-4.3 Different media, techniques, and processes to communicate ideas, experiences, and stories
- 1.K-4.4 Use art materials and tools in a safe and responsible manner
- 1.5-8.1 Select media, techniques, and processes; analyze what makes them effective or not effective in communicating ideas; and reflect upon the effectiveness of their choices
- 1.5-8-2 Intentionally take advantage of the qualities and characteristics of <u>art</u> <u>media</u>, techniques, and processes to enhance communication of their experiences and ideas
- 1.8-12.1 Apply media, techniques, and processes with sufficient skill, confidence, and sensitivity that their intentions are carried out in their artworks (1)
- 1.8-12.2 Conceive and <u>create</u> works of visual art that demonstrate an understanding of how the communication of their ideas relates to the media, techniques, and processes they use (1)
- 1.9-12.1 Communicate ideas regularly at a high level of effectiveness in at least one visual arts medium (3)
- 1.9-12.2 Initiate, define, and solve challenging <u>visual arts problems</u> independently using intellectual skills such as analysis, synthesis, and evaluation (3)

2. The student will be using knowledge of structures and functions.

- 2.K-4.1 Differences among visual characteristics and purposes of art in order to convey ideas
- 2.K-4.2 Describe how different <u>expressive features</u> and <u>organizational principles</u> cause different responses
- 2.K-4.3 Use visual structures and functions of art to communicate ideas

- 2.5-8.1 Generalize about the effects of visual structures and functions and reflect upon these effects in their own work
- 2.5-8.2 Employ organizational structures and analyze what makes them effective or not effective in the communication of ideas
- 2.5-8.3 Select and use the qualities of structures and functions of art to improve communication of their ideas
- **2.8-12.1** Demonstrate the ability to form and defend judgments about the characteristics and structures to accomplish commercial, personal, communal, or other purposes of art (1)

2.8-12.2 Evaluate the effectiveness of artworks in terms of organizational structures and functions (1)

2.8-12.3 Create artworks that use <u>organizational principles</u> and functions to solve specific visual arts problems (1)

2.9-12.1 Demonstrate the ability to compare two or more perspectives about the use of organizational principles and functions in artwork and to defend personal evaluations of these perspectives (3)

2.9-12.2 Create multiple solutions to specific visual arts problems that demonstrate competence in producing effective relationships between structural choices and artistic functions (3)

3. The student will be choosing and evaluating a range of subject matter, symbols, and ideas.

- 3.K-4.1 Explore and understand prospective content for works of art
- 3.K-4.2 Select and use subject matter, symbols, and ideas to communicate meaning
- 3.5-8.1 Integrate visual, spatial, and temporal concepts with content to communicate intended meaning in their artworks
- 3.5-8.2 Use subjects, themes, and symbols that demonstrate knowledge of contexts, values, and aesthetics that communicate intended meaning in artworks
- 3.8-12.1Reflect on how artworks differ visually, spatially, temporally, and functionally, and describe how these are related to history and culture (1)
- 3.8-12.2 Apply subjects, symbols, and ideas in their artworks and use the skills gained to solve problems in daily life (1)
- 3.9-12.1 Describe the origins of specific images and ideas and explain why they are of value in their artwork and in the work of others (3)
- 3.9-12.2 Evaluate and defend the validity of sources for content and the manner in which subject matter, symbols, and images are used in the students' works and in significant works by others (3)
- 4. The student will gain an understanding of the visual arts in relation to history and cultures.

4.K-4.1 Know that the visual arts have both a history and specific relationships to

various cultures

- 4.K-4.2 Identify specific works of art as belonging to particular cultures, times, and places
- 4.K-4.3 Demonstrate how history, culture, and the visual arts can influence each other in making and studying works of art
- 4.5-8.1 Know and compare the characteristics of artworks in various eras and cultures
- 4.5-8.2 Describe and place a variety of art objects in historical and cultural contexts
- 4.5-8.3 Analyze, describe, and demonstrate how factors of time and place (such as climate, resources, ideas, and technology) influence visual characteristics that give meaning and value to a work of art
- 4.8-12.1 Differentiate among a variety of historical and cultural contexts in terms of characteristics and purposes of works of art (1)
- 4.8-12.2 Describe the function and explore the meaning of specific art objects within varied cultures, times, and places
- 4.8-12.3 Analyze relationships of works of art to one another in terms of history, aesthetics, and culture, justifying conclusions made in the analysis and using such conclusions to inform their own art making (1)

4.9-12.1 Analyze and interpret artworks for relationships among form, context, purposes, and critical models, showing understanding of the work of critics, historians, aestheticians, and artists (3)

- 4.9-12.2 Analyze common characteristics of visual arts evident across time and among cultural/ethnic groups to formulate analyses, evaluations, and interpretations of meaning (3)
 - 5. The students will reflect upon and assess the characteristics and merits of their work and the work of others.

5.K-4.1 Understand there are various purposes for creating works of visual art

5.K-4.2 Describe how people's experiences influence the development of specific artworks

5.K-4.3 Understand there are different responses to specific artworks

5.5-8.1 Compare multiple purposes for creating works of art5.5-8.2 Analyze contemporary and historic meanings in specific artworks through

cultural and aesthetic inquiry

5.5-8.3 Describe and compare a variety of individual responses to their own artworks and to artworks from various eras and cultures

5.8-12.1 Identify intentions of those creating artworks, explore the implications of various purposes, and justify their analyses of purposes in particular works (1)
5.8-12.2 Describe meanings of artworks by analyzing how specific works are created and how they relate to historical and cultural contexts (1)
5.8-12.3 Reflect analytically on various interpretations as a means for understanding and evaluating works of visual art (1)

- 5.9-12.1 Correlate responses to works of visual art with various techniques for communicating meanings, ideas, attitudes, views, and intentions (3)
- 6. The student will be making connections between visual arts and other disciplines.

6.K-4.1 Understand and use similarities and differences between characteristics of the visual arts and other arts disciplines

- 6.K-4.2 Identify connections between the visual arts and other disciplines in the curriculum
- 6.5-8.1 Compare the characteristics of works in two or more art forms that share similar subject matter, historical periods, or cultural context
- 6.5-8.2 Describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

6.8-12.1 Compare the materials, <u>technologies</u>, media, and processes of the visual arts with those of other arts disciplines as they are used in creation and types of analysis (1)

6.8-12.2 Compare characteristics of visual arts within a particular historical period or style with ideas, issues, or themes in the humanities or sciences (1)

6.9-12.1 Synthesize the creative and analytical principles and techniques of the visual arts and selected other arts disciplines, the humanities, or the sciences (3)

1-Proficient 2-Progressing 3-Advanced MS-Middle School HS-High School

Westwood Community Schools Standards and Benchmarks VISUAL ART Standards: Westwood CSD (8-12)

Content Standard 1 Understanding and applying media, techniques, and processes

Achievement Standard

Proficient:

- (1.MS) Students apply media, techniques, and processes with sufficient skill, confidence, and sensitivity that their intentions are carried out in their artworks
- (1.MS) Students conceive and <u>create</u> works of visual art that demonstrate an understanding of how the communication of their ideas relates to the media, techniques, and processes they use

Advanced:

- (3.HS) Students communicate ideas regularly at a high level of effectiveness in at least one visual arts medium
- (3.HS) Students initiate, define, and solve challenging <u>visual arts problems</u> independently using intellectual skills such as analysis, synthesis, and evaluation

Content Standard 2 Using knowledge of <u>structures</u> and functions

Achievement Standard

Proficient:

- (1.MS) Students demonstrate the ability to form and defend judgments about the characteristics and structures to accomplish commercial, personal, communal, or other purposes of art
- (1.MS) Students evaluate the effectiveness of artworks in terms of organizational structures and functions
- (1.MS) Students create artworks that use <u>organizational principles</u> and functions to solve specific visual arts problems

Advanced:

- (3.HS) Students demonstrate the ability to compare two or more perspectives about the use of organizational principles and functions in artwork and to defend personal evaluations of these perspectives
- (3.HS) Students create multiple solutions to specific visual arts problems that demonstrate competence in producing effective relationships between structural choices and artistic functions

Content Standard 3

Choosing and evaluating a range of subject matter, symbols, and ideas

Westwood Community Schools Standards and Benchmarks Achievement Standard

Proficient:

- (1.MS) Students reflect on how artworks differ visually, spatially, temporally, and functionally, and describe how these are related to history and culture
- (1.MS) Students apply subjects, symbols, and ideas in their artworks and use the skills gained to solve problems in daily life

Advanced:

• (3.HS) Students describe the origins of specific images and ideas and explain why they are of value in their artwork and in the work of others

□ (3.HS) Students evaluate and defend the validity of sources for content and the manner in which subject

matter, symbols, and images are used in the students' works and in significant works by others

Content Standard 4

Understanding the visual arts in relation to history and cultures

Achievement Standard

Proficient:

- (1.MS) Students differentiate among a variety of historical and cultural contexts in terms of characteristics and purposes of works of art
- (1.MS) Students describe the function and explore the meaning of specific art objects within varied cultures, times, and places
- (1.MS) Students analyze relationships of works of art to one another in terms of history, aesthetics, and culture, justifying conclusions made in the analysis and using such conclusions to inform their own art making

Advanced:

- (3.HS) Students analyze and interpret artworks for relationships among form, context, purposes, and critical models, showing understanding of the work of critics, historians, aestheticians, and artists
- (3.HS) Students analyze common characteristics of visual arts evident across time and among cultural/ethnic groups to formulate analyses, evaluations, and interpretations of meaning

Content Standard 5

Reflecting upon and assessing the characteristics and merits of their work and the work of others

Achievement Standard

Proficient:

- (1.MS) Students identify intentions of those creating artworks, explore the implications of various purposes, and justify their analyses of purposes in particular works
- (1.MS) Students describe meanings of artworks by analyzing how specific works are created and how they relate to historical and cultural contexts
- (1.MS) Students reflect analytically on various interpretations as a means for understanding and evaluating works of visual art

Advanced:

• (3.HS) Students correlate responses to works of visual art with various techniques for communicating meanings, ideas, attitudes, views, and intentions

Content Standard 6

Making connections between visual arts and other disciplines

Achievement Standard

Proficient:

- (1.MS) Students compare the materials, <u>technologies</u>, media, and processes of the visual arts with those of other arts disciplines as they are used in creation and types of analysis
- (1.MS) Students compare characteristics of visual arts within a particular historical period or style with ideas, issues, or themes in the humanities or sciences *Advanced*:
- (3.HS) Students synthesize the creative and analytical principles and techniques of the visual arts and selected other arts disciplines, the humanities, or the sciences

VISUAL ARTS Standards: Westwood CSD (K-4)

Content Standard 1

Understanding and applying media, techniques, and processes

Achievement Standard

- Students know the differences between materials, techniques, and processes
- Students describe how different materials, techniques, and processes cause different responses
- Students use different media, techniques, and processes to communicate ideas, experiences, and stories
- Students use art materials and tools in a safe and responsible manner

Content Standard 2 Using knowledge of <u>structures</u> and functions Westwood Community Schools Standards and Benchmarks Achievement Standard

- Students know the differences among visual characteristics and purposes of art in order to convey ideas
- Students describe how different <u>expressive features</u> and <u>organizational principles</u> cause different responses
- Students use visual structures and functions of art to communicate ideas

Content Standard 3

Choosing and evaluating a range of subject matter, symbols, and ideas

Achievement Standard

- Students explore and understand prospective content for works of art
- Students select and use subject matter, symbols, and ideas to communicate meaning

Content Standard 4

Understanding the visual arts in relation to history and cultures

Achievement Standard

- Students know that the visual arts have both a history and specific relationships to various cultures
- Students identify specific works of art as belonging to particular cultures, times, and places
- Students demonstrate how history, culture, and the visual arts can influence each other in making and studying works of art

Content Standard 5

Reflecting upon and <u>assessing</u> the characteristics and merits of their work and the work of others

Achievement Standard

- Students understand there are various purposes for creating works of visual art
- Students describe how people's experiences influence the development of specific artworks
- Students understand there are different responses to specific artworks

Content Standard 6

Making connections between visual arts and other disciplines

Achievement Standard

• Students understand and use similarities and differences between characteristics of the visual arts and other arts disciplines

• Students identify connections between the visual arts and other disciplines in the curriculum

VISUAL ARTS Standards (5-8)

Content Standard 1

Understanding and applying media, techniques, and processes

Achievement Standard

- Students select media, techniques, and processes; analyze what makes them effective or not effective in communicating ideas; and reflect upon the effectiveness of their choices
- Students intentionally take advantage of the qualities and characteristics of <u>art</u> <u>media</u>, techniques, and processes to enhance communication of their experiences and ideas

Content Standard 2 Using knowledge of <u>structures</u> and functions

Achievement Standard

- Students generalize about the effects of visual structures and functions and reflect upon these effects in their own work
- Students employ organizational structures and analyze what makes them effective or not effective in the communication of ideas
- Students select and use the qualities of structures and functions of art to improve communication of their ideas

Content Standard 3

Choosing and evaluating a range of subject matter, symbols, and ideas

Achievement Standard

- Students integrate visual, spatial, and temporal concepts with content to communicate intended meaning in their artworks
- Students use subjects, themes, and symbols that demonstrate knowledge of contexts, values, and aesthetics that communicate intended meaning in artworks

Content Standard 4

Understanding the visual arts in relation to history and cultures

Achievement Standard

• Students know and compare the characteristics of artworks in various eras and cultures

- Students describe and place a variety of art objects in historical and cultural contexts
- Students analyze, describe, and demonstrate how factors of time and place (such as climate, resources, ideas, and technology) influence visual characteristics that give meaning and value to a work of art

Content Standard 5

Reflecting upon and <u>assessing</u> the characteristics and merits of their work and the work of others

Achievement Standard

- Students compare multiple purposes for creating works of art
- Students analyze contemporary and historic meanings in specific artworks through cultural and aesthetic inquiry
- Students describe and compare a variety of individual responses to their own artworks and to artworks from various eras and cultures

Content Standard 6

Making connections between visual arts and other disciplines

Achievement Standard

- Students compare the characteristics of works in two or more art forms that share similar subject matter, historical periods, or cultural context
- Students describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

Business Law Standards and Benchmarks

Standard 1: Understands how the legal system affects business

Benchmarks (grades 9-12)

- Understand the similarities and differences between common law, statutory law, procedural law, substantive law and agency regulations
- Knows commons sources of law
- Understands the process courts uses to make law, and the importance of precedent in the legal system
- Understand the jurisdiction and function of state courts, federal courts, appellate courts, and the Supreme Court
- Understands the advantages and disadvantages of various methods for resolving disputes, such as litigation, arbitration, mediation and conciliation
- Knows different kinds of business crimes (e.g., arson, forgery, fraud, embezzlement)

Standard 2: Understands the nature of contract law, law of sales and consumer law

Benchmarks (Grades 9-12)

- Understands legislation protecting the rights of consumers (e.g., Fair Credit Reporting Act, Fair Credit Billing Act, Equal Credit Opportunity Act, Consumer Credit Protection Act, Federal Trade Commission Act, Consumer Product Safety Act)
- Knows the characteristics of different kinds of contract (e.g., express and implied, bilateral and unilateral, oral and written)
- Understands rules pertaining to the interpretation and enforcement of contracts
- Understand how different countries laws affect contractual transactions

Standard 3: Understands the nature of agency law and employment law

Benchmarks (Grades 9-12)

- Understands the characteristics of different types of agents
- Understands how specific pieces of legislation affect employers and workers
- Understands the significance of the collective bargaining process
- Understands legal aspects of the hiring process (e.g., what questions cannot be asked during an interview; the legality of asking applicants to take aptitude, polygraph, psychological and/or drug tests)

Standard 4: Understands what property is and how to protect that property

Benchmarks (Grades 9-12)

- Understands the different classes of property
- Understands what real property is, including the nature and transfer or ownership and other's right in your land.
- Knows types of leases, tenants rights, how a lease can be transferred, the duty to pay rent and the lessor's duties
- Understands insurance and how it works, different types of coverage, and what life insurance is
- Knows how to prepare a will, how to distribute an estate and the benefits and types of trusts

Communication Standards & Benchmarks

Kindergarten

Standard 1: Uses the skills and strategies of the reading process

1.K.1 Benchmark One: Understands letter patterns and word structures for meaning *Hear and manipulate sounds in spoken language, especially rhyme, syllables, and initial/final consonant sounds.*

Identify all capital and lower case letters and give a word that begins with each letter Knows letter sounds Understands concept of print

1.K.2 Benchmark Two: Develops vocabulary and concept development for meaning *Identify and sort common words in basic categories (e.g., colors, shapes, foods.) Describe common objects and events in both general and specific language.*

Standard 2: Reads, interprets, and responds to a variety of literacy and informational texts.

2.K.1 Benchmark One: Understands structure of informational texts for meaning

Identify the front cover, back cover and title page of a book

2.K.2 Benchmark Two: Reads, comprehends, responds and analyzes grade-level-appropriate text

Use beginning reading strategies (left to right directionality, one to one correspondences, using meaning, picture cues and beginning sounds and known words).

Use pictures and context to make predictions about story

content

Distinguish fantasy from realistic text

Westwood Community Schools Standards and Benchmarks Connect text to life experiences

Retell familiar text

Identify characters, settings, and important events in text.

First Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.1.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes 3-5 sentences on a given topic.
Writes one or two sentences in response to literature.
Applies elements of poetry.

Big idea

Applies elements of text structure in fiction.
Folk tales
Cumulative tales

Applies elements of text structure in non-fiction.

Life cycle books

Writes thank-you notes.

1.1.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

Shows evidence of revising and proofreading as a result of verbal cues. Shows rudimentary understandings of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes simple sentences.

Applies parts of speech correctly in conventional standard written English.

• Substitutes pronouns for nouns

Applies the conventions of punctuation in writing.

- Period or question mark at the end of sentences Applies the convention of capitalization in writing.
 - The pronoun "I"

• The beginning of sentences Applies the conventions of spelling in writing. Spells designated words correctly. Prints upper and lower case letters legibly. Uses appropriate spacing between words in sentences.

1.1.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- *Listens attentively*
- Asks questions for clarification and understanding
- Follows 2-3 step directions

1.1.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Shares information and ideas audibly
- Shares information using complete sentences

Follows rules of convention and discussion including:

- Uses eve contact
- Contributes to class discussion
- Asks and responds to questions

Second Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.2.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes factual pieces about a topic. Writes a personal experience narrative. Writes personal responses to literature by answering questions related to text. Applies elements of poetry.

- Big idea
- Theme

Applies elements of text structure in fiction.

• Fables

Applies elements of text structure in non-fiction.

• *Recipes*

Westwood Community Schools Standards and Benchmarks Writes an invitation.

1.2.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Uses brainstorming of key thoughts as a prewriting strategy
- Shows evidence of revising and proofreading through feedback from adult (story conference)

Shows rudimentary understandings of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes statement and question sentences. Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using adjectives
- Uses names of others first, then self last when writing about themselves and another person
- Uses past and present verb tenses
- Identifies nouns and verbs

Applies the conventions of punctuation in writing.

- *Period, question mark, or exclamation mark at the end of a sentence*
- An apostrophe in contractions

Applies the conventions of capitalization in writing.

- People's names
- Pet's names
- Days and months

Applies the conventions of spelling in writing.

• Spells designated words correctly

Prints upper and lowercase letters legibly and consistently.

1.2.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- Asks questions for clarification and understanding of a story/ideas/media
- Paraphrases information shared orally by others

• Follows 3-4 step directions

1.2.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Shares information using complete sentences
- *Recounts experiences in a logical sequence*

• Shows evidence of preplanning when giving an oral presentation Follows rules of conversation and discussion.

- Speaks about personal experiences related to the topic
- Contributes relevant ideas to class discussions
- Asks and responds to questions.

Third Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.3.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes a factual paragraph with one main idea using four or more sentences. Writes a personal experience narrative.

Writes personal responses to literature drawing in prior experiences. Applies elements of poetry.

• Author's motivation

Applies elements of text structure in fiction.

• Modern folktales/fractured fairy tales

Applies elements of text structure in non-fiction.

- Biographies
- Brochures
- Game rules

Labels friendly letter parts, writes a friendly letter, and addresses envelopes.

1.3.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Shows evidence of prewriting activities, including but not limited to graphic organizers such as story mapping or webbing
- Writes a rough draft
- *Revises with a peer/adult for additional thought and clarification of ideas*

• Edits according to grade level expectations for mechanics and usage

Shows developing skills in the application of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes statement, question, command, and exclamation sentences. Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using adverbs
- Substitutes subject pronouns for nouns
- Uses past, present, and future verb tenses
- Identifies complete subject and predicate of a sentence
- Uses appropriate word order for clear meaning
- Uses singular and plural nouns
- Identifies common and proper nouns

Applies the conventions of punctuation in writing.

- Correct end marks at the end of sentences
- Periods in abbreviations (Dr., Mr., Mrs., Ms., months of the year, days of the week)

Applies the conventions of capitalization in writing.

- Formal titles (Dr., Mr., Mrs., Miss, Ms.)
- Holidays
- Opening and salutation of a letter
- *Cities, states, and geographical features*
- *AM/PM or a.m./p.m.*

Applies the conventions of spelling in writing.

- Spells designated words correctly.
- Writes lower case cursive letters legibly.

Writes uppercase cursive letters legibly during handwriting instruction.

1.3.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- *Retells, paraphrases, and/or explains what has been said by the speaker/media*
- Asks questions when called on that are related to the topic
- Follows multi-step oral directions

1.3.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Clarifies and enhances the presentation through the use of appropriate props
- *Reads aloud with fluency, rhythm, and pace with appropriate expression*
- Reads aloud original pieces

Follows rules of conversation and discussion.

- Connects and relates personal experiences to the topic.
- Contributes relevant ideas to class discussions.

Fourth Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.4.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes two or three paragraphs using multiple sources.
Writes a personal narrative.
Writes personal responses to literature supporting viewpoint through references to text.
Applies elements of text structure in fiction.

- Fantasy
- Realistic fiction

Applies elements of text structure in non-fiction.

• *How to books*

Labels friendly letter parts, and writes a 2-3 paragraph friendly letter with envelope.

1.4.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Shows evidence of prewriting by completing a story map of idea.
- Writes a multiple paragraph rough draft focusing on main idea, topic sentence, and supporting details
- *Revises with peer/adult for additional thoughts and clarification of ideas*
- Edits according to grade level expectations for mechanics and usage

Shows developing skills in the application of the traits of writing.

• Ideas and content

- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes a variety of sentence types including simple and compound sentences (recognize and avoid run-ons and fragments). Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using conjunctions
- Substitutes object pronouns for nouns
- Uses irregular verbs
- Uses subject/verb agreement
- Uses appropriate word order for clear meaning
- Avoids the use of double negatives
- Uses singular possessive nouns

Applies the conventions of punctuation in writing.

- Commas before a conjunction in a compound sentence
- Apostrophes in singular possessive nouns
- \Underlining titles of books, magazines, and newspapers
- Quotation marks in conversations in sentences
- Periods after abbreviations (St., Rd., Ave., Blvd., Dr., Hwy., Rt., Ct., Jr., Sr., and initials)

Applies the conventions of capitalization in writing.

- Buildings and parks
- First word in a direct quotation within a sentence
- City and state names and postal abbreviations
- Abbreviations (St., Rd., Blvd., Dr., Hwy., Jr., Sr., Ave., Ct., Rt., and initials)

Writes lower case cursive letters legibly consistently. Writes upper case cursive letters legibly and consistently.

1.4.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- *Retells, paraphrases, summarizes, and/or explains what has been said by the speaker/media*
- Asks and answers relevant questions
- Follows multi-step oral directions

1.4.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Clarifies and enhances the presentation through the use of appropriate props
- Reads aloud with expression, enunciation, proper poster, and rate
- Reads aloud original pieces

Follows rules of conversation and discussion.

- Connects and relates personal experiences to the topic
- Contributes relevant ideas to class discussion

Fifth Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.5.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes reports including an introduction, body, and conclusion. Writes personal narratives that establish a situation, plot, point of view, and setting.

Writes a persuasive paragraph.

Writes personal responses to literature drawing on prior knowledge. Applies elements of poetry.

- Tone
- Mood

Applies elements of text structure in fiction.

- Tall tales
- Historical fiction

Applies elements of text structure in nonfiction.

- Newspapers
- Magazines

Labels business letter parts and writes a 2-3 paragraph business letter with envelope.

1.5.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Shows evidence of prewriting activities using a graphic organizer
- Writes a multiple paragraph rough draft focusing on the main idea, topic sentences, with supporting details and descriptive language
- *Revises with peer/adult for additional thoughts and clarification of ideas*

• Edits according to grade level expectations for mechanics and usage

Shows developing skills in the application of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes a variety of sentence types including simple and compound sentences (Recognizes and avoids run-ons and fragments.). Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using preposition phrases
- Chooses appropriate subject and object pronouns
- Uses irregular verbs
- Constructs sentences with simple and compound subjects and/or predicates using correct agreement
- Avoids the use of double negatives
- Uses plural possessive nouns

Applies the conventions of punctuation in writing.

- Commas to set off a direct address
- Apostrophes in the possessive form of plural nouns
- Quotation marks for titles of chapters, poetry, stories, and articles
- Quotation marks to write dialogue, changing paragraphs with each new speaker
- Colons after the greeting and commas after the closing in a business letter

Applies the conventions of capitalization in writing.

• *Geographical names (mountains, continents, etc.)*

Spells designated words correctly in cursive.

1.5.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- Listens to classmates, adults, or media focusing on speaker and asks appropriate questions.
- *Recognizes the difference between humorous and serious comments in presentations*

1.5.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Presents information using previous verbal and nonverbal strategies, gestures, and facial expressions
- Gives an oral presentation based on original work

Follows rules of conversation and discussion.

- Connects and relates personal experiences to the topic
- *Responds to questions and comments giving reasons in support of opinions*

Sixth Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.6.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Develops expository writing. Writes a personal narrative. Writes a composition using persuasion. Writes personal responses to literature making judgments based on their interpretation of material. Writes poetry in various styles. Writes a fictional story based on character. Writes a block or modified block business letter.

1.6.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Selects or develops an organizational scheme to plan writing, including story chart, web, outline, or checklist
- Writes a multiple paragraph rough draft with an introduction, body, and conclusion
- *Revises with a peer/adult for additional thoughts and clarifications of ideas*
- Edits according to grade level expectations for mechanics and usage

Demonstrates developing skills in the application of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions

• Presentation

Writes sentences using phrases or clauses to add depth. Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using indefinite pronouns
- Identifies direct objects in given sentences
- Uses comparative and superlative adjectives and adverbs
- Uses often misused verbs correctly
- Constructs sentences using appositives

Applies the conventions of punctuation in writing.

- Commas to set off introductory words, phrases, or clause
- Commas in an address in a sentence
- Apostrophes to form singular and plural possessives
- Quotation marks in interrupted quotes

Applies the conventions of capitalization in writing.

- Appropriate words in titles
- Interrupted quotations

Spells designated words correctly in cursive.

1.6.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- Identifies the speaker's/media's purpose
- Completes guided notes form an oral presentation
- *Recognizes the difference between humorous and serious comments in presentation*

1.6.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Presents information using previous verbal and nonverbal strategies
- Gives an oral presentation based on original work using note cards and/or outline

Follows rules of conversation and discussion.

- Shares personal reflections/responses to literature
- *Responds to questions and comments giving reasons in support of opinions*

Westwood Community Schools Standards and Benchmarks **Seventh Grade**

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.7.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes expository compositions based on research from multiple sources and comparison/contrast.
Writes personal narratives.
Writes a composition using persuasion.
Writes personal responses to literature making a personal connection.
Writes poetry in various styles.
Writes a fictional story focusing on narrative voice and point of view.

1.7.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Develops an outline and/or graphic organizer to build a foundation for a multiple page paper
- Writes rough draft using the student-created outline and/or graphic organizer
- *Revises draft to expand or narrow the main ideas appropriately and to improve the coherence including use of transitions and logical order*
- Edits according to grade level expectations for mechanics and usage

Demonstrates developing skills in the application of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes sentences using independent (main) clauses and dependent (subordinate) clauses.

Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using indefinite pronoun subjects and verbs in agreement
- Uses pronoun/antecedent agreement
- Uses adjectives and adverbs correctly
- Uses consistent verb tense

• Identifies predicate adjective and predicate noun in given sentences

Applies the conventions of punctuation in writing.

- Colons
- Semi-colons
- Hyphens
- Distinguishes between proper use of underlining and quotation mark.

Applies the conventions of capitalization in writing.

• Proper adjectives

1.7.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Uses appropriate listening and observing strategies.

- Listens to recall and records facts and details
- Uses critical listening to analyze oral/media presentations
- Utilizes note-taking strategies for oral presentations

1.7.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Presents information using previous verbal and nonverbal strategies and tone
- Gives an oral presentation based on original work using note cards and/or outline and visual aids

Follows the rules of conversation and discussion.

- Critiques a literary piece with supporting evidence
- Responds to questions and comments giving reasons in support of opinions

Eighth Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.8.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes expository compositions based on research, compare/contrast, cause/effect.
Writes a narrative with consistent first or third person point of view.
Writes a composition using persuasion.
Writes personal responses analyzing literary elements of a selections.

Writes poetry in various styles. Writes a fictional story focusing on flashback and foreshadowing. Writes a block or modified block business letter.

1.8.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Selects or develops an organizational scheme to plan a writing, considering topic, length, and purpose
- Writes a multiple page draft using organizational scheme, citing sources when appropriate
- *Revises draft to expand or narrow and to improve coherence*
- Edits according to grade level expectations for mechanics and usage

Demonstrates developing skills in the application of the traits of writing.

- Ideas and content
- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes complex sentences and sentences using a variety of descriptive words, phrases, and clauses.

Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using subordinating conjunctions
- Constructs sentences using interjections
- Uses first or third person point of view consistently
- Uses indirect objects in sentences correctly

Applies the conventions of punctuation in writing.

- Parentheses
- Dashes
- Commas to set off appositives

Applies the conventions of capitalization in writing.

• Historical events and documents

Spells designated words correctly in cursive.

1.8.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Chooses appropriate listening and observing strategies to identify nonverbal barriers to effective listening including verbal and nonverbal clues.

Chooses appropriate listening and observing strategies to evaluate speaker/media for its effectiveness, technique, and purpose.

1.8.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience.

- Presents information using previous verbal and nonverbal strategies and poise
- Delivers an oral presentation to inform using effective delivery skills and audience consideration

Follows rules of conversation and discussion.

- Critiques a literary piece with supporting evidence
- *Responds to questions and comments giving reasons in support of opinions*

Ninth - Twelfth Grade

Standard 1: Uses skills and strategies necessary to communicate ideas appropriate to grade level.

1.9-12.1 Benchmark One: Develops original pieces for a variety of purposes and audiences.

Writes expository compositions.
Writes narrative compositions.
Writes persuasive compositions.
Writes descriptive compositions.
Writes personal responses to literature by analyzing author's style and technique.
Writes pieces focusing on various literary elements.

1.9-12.2 Benchmark Two: Demonstrates competence in the general skills and strategies of the process of writing.

Applies the writing process.

- Selects or develops an organizational scheme to plan a writing considering topic, length, and purpose
- Writes a multiple page draft using organizational scheme, citing sources when appropriate
- Revises draft to expand or narrow and to improve coherence
- Edits according to grade level expectations for mechanics and usage

Applies the traits of writing.

• Ideas and content

- Organization
- Voice
- Word choice
- Sentence fluency
- Conventions
- Presentation

Writes using a variety of sentence types focusing on parallel structure. Applies parts of speech correctly in conventional standard written English.

- Constructs sentences using perfect tenses appropriately
- Constructs sentences using phrases and clauses appropriately
- Avoids the use of second person point of view

Applies the conventions of punctuation in writing.

- Ellipses
- Brackets
- Applies the conventions of capitalization in writing.

• *Religions, their followers, proper pronouns, and course names Applies the conventions of spelling in writing.*

1.9-12.3 Benchmark Three: Listens and observes for a variety of purposes using effective techniques.

Chooses appropriate listening and observing strategies to evaluate the clarity, effectiveness, technique and purpose of a speaker or media message.

Chooses appropriate listening and observing strategies to evaluate selling techniques in media focusing on propaganda and faulty language.

1.9-12.4 Benchmark Four: Speaks for a variety of purposes using effective techniques.

Uses strategies to communicate to an audience by applying previous verbal and nonverbal strategies to deliver speeches:

- To inform
- To persuade
- To entertain

Follows rules of conversation and discussion.

- Critiques a literary piece with supporting evidence
- *Responds to questions and comments giving reasons in support of opinions*

Counseling Program Standards & Benchmarks

<u>Mission Statement</u>: The Mission of the Westwood Guidance Department is to promote excellence for all standards in the areas of academic, career and social/emotional development. Development will be achieved through a K-12 comprehensive counseling guidance program.

Vision: The vision of the Westwood Guidance Program is that all students shall be positive contributors to the society, through the development of skills, which lead students to make healthy lifestyle choices. The Counseling & Guidance Program is an integral part of the K-12 educational experience. It is composed of 4 major components:

- Curriculum
- Individual Planning
- Responsive Services
- System Support

The program addresses the needs of elementary, junior high and high school students as they encounter and deal directly with important learning and life issues.

The program is implemented by the K-6 and 7-12 school counselors with the support of teachers, students and parents.

Strand 1 – Academic Development

Academic Development: Standard A Student will acquire the attitudes, knowledge, and skills that Contribute to effective learning in school and across the life span Westwood Community Schools Standards and Benchmarks **Student Benchmarks**

Students will:

- Display a positive interest in learning and pride in work
- Accept and take responsibility for their actions
- Use communication skills to know when and how to ask for help when needed.
- Demonstrate the ability to work independently, as well as the ability to work cooperatively with other students

Academic Development: Standard B

Students will complete school with the academic preparation essential to choose from a wide range of substantial post-secondary options.

Student Benchmarks

Students will:

- Apply the study skills necessary for academic success at each level as well as become self self-directed and independent learners
- Establish challenging academic goals in elementary, middle/junior high, and high school
- Identify post-secondary options consistent with interests, achievement, aptitude and abilities (High School)

Academic Development: Standard C

Students will understand the relationship of academics to the world of work and to life at home and in the community.

Student Benchmarks:

Students will:

• Demonstrate the ability to balance school, studies, extra-circular activities, work, leisure time, and family life

- Demonstrate an understanding of the value of lifelong learning as essential to maintaining life goals (middle School, High School)
- Understand how school success and academic achievement enhance future career and vocational opportunities

Strand II – Career Development

Career Development – Standard A Students will acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decisions.

Student Benchmarks

Students will:

- Understand the importance of responsibility, dependability, punctuality, integrity, and effort in the workplace
- Develop skills to locate, interpret, and evaluate traditional and nontraditional career information
- Develop an awareness of personal abilities, skills, interests and motivations

Career Development: Standard B

Students will employ strategies to achieve future career goals with success and satisfaction.

Student Benchmarks

Students will:

- Apply decision-making skills to career planning, course selection, and career transitions (Middle School and High School)
- Demonstrate awareness of the education and training needed to achieve career goals (Middle School and High School)
- Demonstrate knowledge of the career planning process

Career Development: Standard C

Students will **understand the relationship among personal qualities, education,** *training, and the work of work.*

Student Benchmarks

Students will:

- Understand the importance of equity and access to career choice
- Understand that work is an important and satisfying means of personal expression
- Demonstrate how interests, abilities, and achievement relate to achieving personal, social, educational, and career goals

Strand III – Personal and Social Development

Personal and Social Development: Standard A Students will **acquire the knowledge, attitudes, and interpersonal skills to help them understand and respect self and others.**

Student Benchmarks

Students will:

- Develop a positive attitude toward self as a unique and worthy person
- Identify and express feelings, values, attitudes, and beliefs
- Recognize and understand rights, needs, responsibilities, and appropriate behavior
- Recognize, accept, and appreciate individual, family, ethnic, and cultural differences
- Use effective communication skills

Personal and Social Developments: Standard B

Westwood Community Schools Standards and Benchmarks Students will make decisions, set goals, and take necessary action to achieve goals.

Student Benchmark

Students will:

- Use decision-making and problem solving skills that include an understanding of the consequences of their decisions and their choices
- Develop Effective coping skills for dealing with problems
- Demonstrate when, where, and how to seek help for solving problems and making decisions
- Know how to apply conflict resolution skills

Personal and Social Development: Standard C

Students will acquire emotional and physical coping skills, which will result in total well being.

Students Benchmarks

Students will:

- Learn to manage life events that can cause stress, conflict, or emotional and physical danger
- Recognize and use community and school resources when experiencing personal and social problems
- Demonstrate the ability to assert confidentiality in relationships with others
- Learn how to cope with peer pressure

Extended Learning Program (TAG) Curriculum Outline

Gifted and talented children are now referred to as "Children who give evidence of high performance in areas such as intellectual, creative, artistic, leadership capacity or specific academic fields and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities"

P.L. 97-35, Education Consolidation & Improvement Act, Congress, 1981

The goal of Westwood's Extended Learning Program is to provide opportunities for and meet the needs of children possessing high intellectual ability. In order to help the Gifted and Talented realize their full potential, this program will provide specially planned educational services beyond those normally provided by the standard school program.

WESTWOOD EXTENDED LEARNING PROGRAM GOALS

- 1) Develop a positive realistic self-concept
- 2) Develop an appreciation of individuality and increase his/her ability to work with many types of people
- 3) Develop and use self-directed independent learning skills
- 4) Develop and apply critical thinking abilities
- 5) Develop and apply creative abilities
- 6) Develop self-expression
- 7) Explore a wide variety of topics not available in the regular classroom and in more depth
- 8) Provide exposure to new experiences

STANDARDS

- I. Identified students will be offered learning opportunities appropriate for their gifts, talents, interests, motivation, and needs.
 - a. Assessment-Conferences with student and/or parent

- II. Students with a very high general intelligence will be offered for academic learning of core subject at a rate and/or degree of learning appropriate to their abilities and motivation.
 - a. Advanced courses
 - b. Accelerated learning options monitored by TAG teacher
 - c. Differentiation within the classroom
 - d. Special placements
 - e. Mentorships
 - f. Independent studies
 - g. Distance learning, computer-assisted learning
- III. Students with high general and or specific academic intelligence will be offered opportunities to learn a creative problem solving model and problem solving strategies.
 - a. Future problem solving
 - b. Math Olympiad
- IV. Students will be given the opportunities to learn and practice information seeking and research skills.
 - a. Questioning strategies
 - b. Independent research projects
 - c. Graphic organizers
- V. Students will have opportunities to learn and apply technology as a tool to assist learning.
- VI. Students will be given opportunities to learn about the nature of competition.

Family and Consumer Science Standards & Benchmarks

Career, Community, and Family Connections

<u>Standard 1</u>: Integrate multiple life roles and responsibilities in family, work, and community settings.

Benchmark: Analyze strategies to manage multiple roles and responsibilities (individual, family, career, community and global)

Indicators: Summarize local and global policies, issues and trends in the workplace and community that affect individuals and families.

- Analyze the effects of social, economic, and technological change on work and family dynamics
- Analyze ways that individual career goals can affect the family's capacity to meet goals for all family members
- Analyze potential effects of career path decisions on balancing work and family
- Define goals for life-long learning and leisure opportunities for all family members
- Develop a life plan including pathways to acquiring the knowledge and skills needed to achieve individual, family, and career goals

Indicator: Demonstrate transferable and employability skills in school, community, and workplace settings.

- Analyze potential career choices to determine the knowledge, skills, and attitudes associated with each career
- Demonstrate job seeking and job keeping skills
- Apply communication skills in school, community and workplace settings
- Demonstrate teamwork skills in school, community and workplace settings
- Analyze strategies to manage the effects of changing technologies in workplace settings
- Demonstrate leadership skills and abilities in school, workplace and community settings
- Analyze factors that contribute to maintaining safe and healthy school, work and community environments
- Demonstrate work ethics and professionalism

Indicator: Evaluate the reciprocal effects of individual and family participation in community activities.

- Analyze goals that support individuals and family members in carrying out community and civic responsibilities
- Demonstrate skills that individuals and families can utilize to support civic engagement in community activities
- Analyze personal and family assets and skills that provide services to the community
- Analyze community resources and systems of formal and informal support available to individuals and families
- Analyze the effects of public policies, agencies, and institutions on the family
- Identify ways individuals and families can influence change in policies, agencies, and institutions that affect individuals and families

Indicator: Model Iowa Comprehensive Occupational competencies (Indicators)

- Demonstrate alternative ways of effective communication
- Describe ways to build good interpersonal relationships
- Identify risks of sexual activity
- Identify and demonstrate appropriate response to family problems and crisis
- Identify forms of stereotyping and discrimination that utilize appropriate responses
- Develop problem-solving techniques
- Identify ways to deal with peer pressure
- Describe ways to strengthen family
- Identify ways to balance work, family and individual needs
- Develop short and long-term planning, goal-setting and decision-making skills
- Analyze family living/parenthood related occupations
- Demonstrate community involvement and responsibility
- Locate and/or utilize community resources available to self and family
- Analyze personal needs and characteristics and their impact on family, career and community
- Evaluate effective conflict prevention and management techniques
- Demonstrate teamwork and leading skills in the family, workplace and community
- Demonstrate standards that guide behavior in interpersonal relationship

Indicator: Academic Proficiencies (no child left behind):

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Demonstrate competence in writing and editing and editing documents, using correct grammar, and punctuation

Mathematics

- Adds, subtracts, divides, and multiples whole and mixed numbers, fractions and decimals
- Mentally adds, subtracts, divides and multiplies whole numbers

<u>Standard 2</u>: Evaluate management practices related to the human, economic, and environmental resources.

Benchmarks: Demonstrate management of individual and family resources, such as food, clothing, shelter, health care, recreation, transportation, time and human capital.

Indicator:

- Apply management and planning skills and processes to organize tasks and responsibilities
- Analyze how individuals and families make choices to satisfy needs and wants
- Analyze decisions about providing safe and nutritious food for individuals and families
- Apply consumer skills to providing and maintaining clothing
- Apply consumer skills to decisions about housing, utilities, an furnishing
- Summarize information about procuring and maintaining health care to meet the needs of individuals and family members
- Apply consumer skills to decisions about recreation
- Apply consumer skills to acquire and maintain transportation that meets the needs of individuals and family members

Indicator: Analyze the relationship of the environment to family and consumer resources.

- Analyze individual and family responsibility in relation to the environmental trends and issues
- Summarize environmental trends and issues affecting families and future generations
- Demonstrate behaviors that conserve, reuse, and recycle resources and maintain the environment
- Explain government regulations for conserving natural resources

Indicator: Analyze policies that support consumer rights and responsibilities.

- Analyze state and federal policies and laws providing consumer protection
- Analyze how policies become laws related to consumer rights
- Analyze skills used in seeking information related to consumer rights

Indicator: Evaluate the effects of technology on individual and family resources.

- Summarize types of technology that effect family and consumer decision making
- Analyze how media and technological advances affect family and consumer decisions
- Assess the use of technology and its effect on quality of life

Indicator: Analyze relationships between the economic system and consumer actions.

- Analyze the use of resources in making choices that satisfy needs and wants of individuals and families
- Analyze individual and family roles in the economic system
- Analyze economic effects of laws and regulations that pertain to consumers and providers of services
- Analyze practices that allow families to maintain economic self-sufficiency

Indicator: Demonstrate management of financial resources to meet the goals of individuals and families across the life span.

- Evaluate the need for personal and family financial planning
- Apply management principles to individual and family financial practices
- Apply management principles to decisions about insurance for individuals and families
- Evaluate personal and legal documents related to managing individual/family finances

Model Iowa Comprehensive Occupational Competencies

Indicators:

- Identify resources and procedures for planning expenses, saving and managing finances
- Apply the principles of management in the home (i.e., prioritizing, planning, delegation, evaluation, time allocation)
- Use the decision-making planning process to calculate expenses, savings and to manage finances
- Develop plans to protect and track resources
- Analyze economic use of resources

Academic Proficiencies (No Child Left Behind):

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- demonstrate competence in speaking to provide, distribute or find information
- demonstrates competence in writing and editing documents, using correct grammar and punctuation
- demonstrate competence in making oral formal and informal presentations, including selecting and using media
- adapts listening strategies to utilize verbal and nonverbal content of communication

Mathematics

- interprets charts, tables and graphs
- adds, subtracts, divides, and multiplies, mixed numbers, fractions and chemicals
- uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, calculate square root, percentage and ratios
- mentally adds, subtracts, divides and multiplies whole numbers

Nutrition and Wellness

<u>Standard 14</u>: Demonstrate nutrition and wellness practices that enhance individual and family well-being.

Benchmarks: Analyze factors that influence nutrition and wellness practices across the life span.

Indicator:

- Explain physical, emotional, social, psychological, and spiritual components of individual and family wellness
- Analyze the effects of psychological, cultural, and social influences on food choices and other nutrition practices
- Analyze the government, economic, and technological influences of food choices and practices
- Analyze the effects of global and local events and conditions on food choices and practices
- Analyze legislation and regulations related to nutrition and wellness

Indicator: Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.

• Analyze the effect of nutrients of health, appearance, and peak performance

- Analyze the relationship of nutrition and wellness to individual and family health throughout the life span
- Analyze the effects of food and diet fads, food addiction and eating disorders to health and wellness

Indicator: Evaluate various dietary guidelines in planning to meet nutrition and wellness needs.

- Apply various dietary guidelines in planning to meet nutrition and wellness needs
- Design strategies that meet the health and nutrition requirements of individuals and families with special needs
- Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods

Indicator: Evaluate factors that affect food safety, from production through consumption

- Analyze conditions and practices that promote safe food handling
- Analyze safety and sanitation practices throughout the food chain
- Analyze how changes in national and international food production and distribution systems influence the food supply
- Analyze federal, state, and local inspection and labeling systems that protect the health of individuals and the public
- Analyze food borne illness factors, including causes, foods at risks, and methods of prevention commercially and by individuals and families
- Analyze public dialogue about food safety and sanitation

Indicator: Evaluate the influence of science and technology on food composition, safety, and other issues.

- Analyze how scientific and technical advances influence the nutrient content, availability, and safety of foods
- Analyze how the scientific and technical advances in food processing, storage, product development, and distribution influence nutrition and wellness
- Analyze the effects of technological advances in selection, preparation, and home storage of food
- Analyze the effects of food science in technology on meeting nutritional needs

Model Iowa Comprehensive Occupational Competencies (Indicators):

- Identify consumer options in nutrition, health and wellness
- Plan, prepare, serve an evaluate meals for good health throughout the lifespan

Academic Proficiencies

Language

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

Mathematics

- Adds, subtracts, divides, multiples whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root
- Mentally adds, subtracts, divides, and multiples whole numbers

Science

- Analyzes chemical in society
- Analyzes and evaluate environmental issues
- Describes and explains diseases
- Identifies organisms such as bacteria and fungi
- Uses common laboratory equipment and procedures
- Applies and uses laboratory techniques safely
- Measures weight, temperature, time and volumes of liquids and solids
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes human maintenance and weight gain or loss

Parenting

<u>Standard 15</u>: Evaluate the impact of parenting roles and responsibilities on strengthening the well being of individuals and families.

Benchmarks: Analyze roles and responsibilities of parenting.

Indicators:

- Analyze parenting roles across the life span
- Analyze expectations and responsibilities of parenting
- Analyze consequences of parenting practices to the individual, family and society
- Analyze societal conditions that influence parenting across the life span
- Explain cultural differences in roles and responsibilities of parenting

Indicator: Evaluate parenting practices that maximize human growth and development

• Choose nurturing practices that support human growth and development

- Apply communication strategies that promote positive self-esteem in family members
- Assess common practices and emerging research about discipline on human growth and development
- Assess the effects of abuse and neglect on children and families and determine the methods for prevention
- Apply criteria for selecting care and services for children

Indicator: Evaluate external support systems that provide services for parents

- Assess community resources and services available to families
- Appraise community resources that provide opportunities related to parenting

Indicator: Analyze physical and emotional factors related to beginning the parenting process

- Analyze biological processes related to prenatal development, birth, and health of child and mother
- Analyze the emotional factors of parental development and birth in relation to the health of parents and child
- Analyze implications of alternatives to biological parenthood
- Analyze legal and ethical impacts of current and emerging technology on fertility and family planning

Model Iowa Comprehensive Occupational Competencies (Indicators):

- Identify strategies that promote positive relationships between family members
- Evaluate factors that promote physical and emotional health of a child and parents

Academic Proficiencies:

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using carious information source, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence ins peaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

Textiles and Apparel

<u>Standard 16:</u> Integrate Knowledge, skills, and practices required for careers in textiles and apparel.

Benchmarks: Analyze career paths within textile, apparel, and design industries

Indicator:

- Explain the roles and functions of individuals engaged in textiles, apparel, and design careers
- Analyze opportunities for employment and entrepreneurial endeavors
- Summarize education and training requirements and opportunities for career paths in textiles, apparel and design services
- Analyze the effects of textiles, apparel, and design occupations on local, state, national, and global economics
- Create an employment portfolio for use with applying for internships, work-based learning opportunities , and employment in textiles, apparel and design industries
- Analyze the role of professional organizations in textiles, apparel and design industries

Indicator: Evaluate fiber and textile products and materials.

- Apply appropriate terminology for identifying, comparing, and analyzing the most common generic textile fibers
- Evaluate performance characteristics of textile fiber and fabrics
- Summarize textile legislation, standards, and labeling in the global economy
- Analyze effects of textile characteristics on design, construction, care, use and maintenance of products
- Apply appropriate procedures for care of textile products

Indicator: Demonstrate fashion, apparel and textile design skills.

- Explain the ways in which fabric, texture, and pattern can affect visual appearance
- Apply basic and complex color schemes and color theory to develop and enhances visual effects
- Utilize elements and principles of design in designing, constructing, and/or altering textile, apparel, and fashion products
- Demonstrate design concepts with fabric or technology/computer, using draping and/or flat pattern making techniques
- Generate designs that takes into consideration ecological, environmental, sociological, psychological, technical, and economic trends and issues
- Apply elements and principles of design to assist consumers and businesses in making decisions
- Demonstrate ability to use technology for fashion, apparel, and textile design

Indicator: Demonstrate skills needed to produce, alter, or repair fashion, apparel and textile products.

- Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel and textile construction, alteration and repair
- Explain production processes for creating fibers, yarn, woven, and knit fabrics, and non-woven textile products
- Use appropriate industry products and materials for cleaning, pressing and finishing textile, apparel and fashion products

- Analyze current technology and trends that facilitate design and production of textile, apparel, and fashion products
- Demonstrate basic skills for producing and altering textile products and apparel

Indictor: Evaluate elements of textile, apparel, and fashion merchandising.

- Apply marketing strategies for textile, apparel, and fashion products
- Analyze the cost of constructing, manufacturing, altering, or repairing textile, apparel, and fashion products
- Analyze ethical considerations for merchandizing apparel and textile products
- Apply external factors that influence merchandising
- Critique varied methods for promoting apparel and textile products
- Apply research methods, including forecasting techniques, for marketing apparel and textile products

Indicator: Evaluate the components of customer service

- Analyze factors that contribute to quality customer relations
- Analyze the influence of cultural diversity as a factor in customer relations
- Demonstrate the skills necessary for quality customer service
- Create solutions to address customer concerns

Indicator: Demonstrate general operational procedures required for business profitability and career success

- Analyze legislation, regulations, and public policy affecting the textile, apparel, and fashion industries
- Analyze personal and employer responsibilities and liabilities regarding industryrelated safety, security, and environmental factors
- Analyze the effects of security and inventory control strategies, cash and credit transaction methods, laws and worksite policies, on loss prevention and store profit
- Demonstrate procedures for reporting and handling accidents, safety, and security incidents
- Analyze operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit
- Demonstrate knowledge of the arts, of various resources, and cultural impact upon the textile, apparel and fashion industries

Model Iowa Competencies (Indicators):

- Assess the importance of appearance, first impressions, and self expression through clothing
- Plan and evaluate clothing and accessory purchases to meet clothing needs on a budget
- Identify fabrics, fabric construction, finishes and fabric care
- Create and design clothing based upon the elements and principles of clothing design

- Appropriately design clothing based upon the elements and principles of clothing design
- Follow preparation procedures for constructing and evaluating a sewing project
- Demonstrate repair, alteration and recycling techniques
- Demonstrate the use of equipment, fabrics and supplies with proper procedures for both ready-to-wear and constructed garments
- Create and maintain an organized, safe and convenient work environment
- Develop appropriate oral, visual, written and non-verbal communication skills
- Analyze company, state and federal laws and guidelines of the clothing and textile industry
- Identify skills needed for careers in the clothing and textile industry
- Identify clothing and textile careers and resources

Academic Proficiencies (No Child Left Behind):

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

Mathematics

- Adds, subtracts, divides and multiplies whole and mixed numbers, fractions and decimals
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers
- Understands and applies basic methods of measurement
- Calculates and evaluates precision measurements
- Measures distance using standard measurements tools
- Interprets charts, tables and graphs

Science

- Uses computers for information processing
- Analyzes chemicals in society
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes and explains chemical reactions
- Uses computers for information processing

Westwood Community Schools Standards and Benchmarks Family & Consumer Sciences Middle Level

Nutrition and Wellness

<u>Standard XIV:</u> Demonstrate nutrition and wellness that enhance individuals and family well being.

Benchmarks: Analyze factors that influence nutrition and wellness practices across the life span.

Evaluate factors that affect food safety, from production through consumption.

Model Iowa Competencies (Indicators):

- Evaluate diets based on individual needs and personal health
- Identify and evaluate factors that promote personal wellness
- Describe social and cultural influences that affect food choices
- Analyze and select foods based on nutritional value

Academic Proficiencies:

Language

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals and calculate square root
- Mentally adds, subtracts, divides, and multiples whole numbers

Science

- Analyzes chemicals in society
- Analyzes and evaluates environmental issues
- Describes and explains diseases
- Identifies organisms such as bacteria and fungi
- Uses common laboratory equipment and procedures
- Applies and uses laboratory techniques safely
- Measures weight, temperature, time and the volumes of liquids and solids
- Applies and uses maps, charts, tables and graphs to complete tasks

• Describes human maintenance and weight gain to loss

Consumer and Family Resources

<u>Standard II</u>: Evaluate management practices related to the human, economic, and environmental resources.

Benchmarks: Understands the importance of money and time management, understands how to budget personal income, knows shopping techniques used to make consumer decisions (e.g., comparing the quality, features, and costs of similar products, knows methods used to conserve, preserve, and recycle resources, understands the relationship between advertising, product and price.

Model Iowa Competencies (Indicators):

- Identify the difference between consumer wants and needs
- Develop an awareness of the steps needed in achieving personal goals
- Examine environmental trends and issues affecting families and future generations
- Determine the decision-making process used to effectively use the resources of time, energy, and money
- Demonstrate methods used to conserve, reuse and recycle resources
- Use the decision-making process to evaluate media/marketing advertising techniques

Academic Proficiencies:

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrate competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuations
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication

Mathematics

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, and multiplies, mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiples whole numbers

Textiles and Apparel

Standard XVI: Integrate knowledge, skills, and practices required for the careers in textiles and apparel.

Benchmarks: Explore the various career paths within textiles and apparel design industries, evaluate elements of textiles and apparel merchandising.

Model Iowa Competencies (Indicators):

- Identify and practice personal care skills
- Examine the effect that fabric, texture, and pattern have on visual appearance
- Understand the importance of personal image
- Discuss the importance of clothing selection and care
- Use a variety of equipment, tools, and supplies used for apparel and textile construction, alteration, and/or repair

Academic Proficiencies

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrate competence in using various information sources, including knowledge-based and technical texts to perform specific tasks
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrate competence in writing and editing documents, using correct grammar, and punctuation

Mathematics

- Adds, subtracts, divides, and multiples whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiples whole numbers
- Understands and applies basic methods of measurement
- Calculates and evaluates precision measurements
- Measures distance using standard measurement tools
- Interprets charts, tables, and graphs

Science

- Uses computers for information processing
- Identify the various agricultural products produced and processed in Iowa (i.e., fruits and vegetable, grains, meat, dairy, etc.)
- Identify the various agricultural processing methods for agricultural products (i.e., irradiation, dried, frozen, thermo, fresh, vacuum sealed, canned, juiced, etc.)
- Identify how genetically altered agricultural products affect the marketing of those agricultural products
- Demonstrate methods for storing and monitoring agricultural products (i.e., drying corn, moisture testing, insect damage, etc.)
- Describe quality factors for agricultural products (i.e., meats, grains, fiber, fruits, and vegetable, etc)
- Describe how health concerns, consumer issues, and political groups impact products
- Identify governmental agencies and structures regulating food products
- Identify the parts of plants and animals used processed food and fiber products

Foreign Language Standards and Benchmarks

<u>Standard 1</u> Uses the target language to engage in conversations, express feelings, and emotions, exchange opinions, and provide and obtain information.

Benchmark: Level 1

- **1.1.1** Uses appropriate vocabulary, gestures, and oral expressions for greetings, Introductions, leave taking, and other common or familiar interactions (e.g. name, address, general health/state of being) –Teacher made oral and written tests
- **1.1.2** Knows how to express likes, dislikes, and simple preferences in everyday situations (e.g., objects, categories, people, events, favorite activities) --- Teacher made oral and written tests
- **1.1.3** Uses basic vocabulary to describe assorted objects in everyday environments --- oral and written teacher made tests
- **1.1.4** Know how to give and follow simple instructions in the target language (e.g., in games, with partners or groups, giving commands suggested by a picture) --- Teacher made test
- **1.1.5** Knows how to exchange information about schedules (place, date, time) of general events (e.g., classes, meetings, concerts, meals) --- Oral and written teacher made tests

Benchmark: Level 11

- **1.2.1** Uses verbal and written exchanges to gather and share personal data, information, and opinions (e.g., events in one's life, past experiences, significant details related to topics that are of common or personal interest)--- Oral presentation
- **1.2.2** Uses the target language to plan events and activities with others (e.g., extending, accepting, or declining invitations; using authentic schedules) ---Teacher made test, oral presentation
- **1.2.3** Uses appropriate vocabulary to give or follow directions (e.g., sequence of steps, giving directions to a location) --- Oral presentation or skit, Teacher made test

1.2.4 Uses appropriate vocabulary to acquire goods and services through basic negotiation of procedures and exchange of monies --- Skit

Benchmark: Level Ill

- **1.3.1** Uses repetition, rephrasing and gestures to assist in communicating spoken messages Teacher made test, oral presentation
- **1.3.2** Uses appropriate cultural responses in diverse exchanges (e.g., expressing gratitude, extending and receiving invitations, apologizing, communicating preferences: --- Oral presentation, book test
- **1.3.3** Knows how to exchange information about current or past events and aspirations In one's personal life and in those of family, friends, and community Oral, Presentation, diary, teacher-made test

Benchmark: Level IV

- **1.4.1** Knows how to adequately express one's point of view through the exchange of personal feeling and ideas --- Teacher test, presentation
- **1.4.2** Uses appropriate vocabulary to express personal reactions and feelings about authentic literary texts (e.g., poems, plays, short stories, novels) --- Activities, essay
- **1.4.3** Uses rephrasing and circumlocution to communicate a message in the target language --- Oral activities

<u>Standard 2</u> Comprehends and interprets written and spoken language on diverse topics from diverse media.

Benchmark: Level 1

- **2.1.1** Recognizes common expressions in simple spoken sentences --- Teacher made test
- **2.1.2** Understands the basic ideas of oral messages based on simple or familiar topics appropriate at this developmental level (e.g., songs, fairy tales) --- listening test
- **2.1.3** Understands the principal message in ability-appropriate, highly illustrated texts that used many words that are similar to those in one's native language (e.g., stories, advertisements) --- Book test, project
- **2.1.4** Understands short conversations between familiar persons on familiar topics (e.g., favorite activities) ---Book test, audio/oral written activities

- **2.1.5** Understands brief written messages and personal notes on familiar topics (e.g., everyday school and home activities) --- Teacher made test
- **2.1.6** Identifies people and objects in their environment based on oral and written descriptions --- Teacher-made test

Benchmark: Level II

- **2.2.1** Understands the basic ideas of oral messages based on simple or familiar topics appropriate at the developmental level (e.g., fairy tales, songs) --- Checklist
- **2.2.2** Understands the principal message in ability-appropriate, highly illustrated texts that use many words that are similar to those in one's native language (e.g., stories, advertisements) --- Teacher-made test
- **2.2.3** Understands the main ideas of ability-appropriate video programs on familiar topics --- Teacher-made and book test
- **2.2.4** Understands short conversations between familiar persons on familiar topics (e.g., favorite activities) --- Presentation
- **2.2.5** Understands brief written messages and personal notes on familiar topics (e.g., everyday school and home activities) --- Book test
- **2.2.7** Identifies people and objects in their environment based on oral and written descriptions --- Book test, activities
- **2.2.8** Understands the content of ability-appropriate primary sources on familiar topics (e.g., personal letters, pamphlets, illustrated newspaper and magazine articles, advertisements) --- Teacher-made test

Benchmark: Level III

2.3.1 Understands the main idea and/or the principal characters in written poems, short folk tales, or illustrated stories that are appropriate at this developmental level ---- Written activities, teacher-made test

- **2.3.2** Understands the main idea and themes, as well as some details, from diverse, authentic, ability-appropriate spoken media (e.g., radio, television) on topics of personal interest or interest to peers in the target culture --- Teacher-made test, activities
- **2.3.3** Recognizes and understands various expressions and structures in spoken forms of the target language --- Oral and written book and teacher-made test
- **2.3.4** Uses known language to make informal guesses about the meaning of longer, more complicated messages delivered orally and in writing (e.g., guesses at the meaning of unknown words based on the context in which they are used) ---Oral and book test

Benchmark: Level IV

- **2.4.1** Understands the main ideas and significant relevant details of extended discussions, lectures, formal presentations, and various forms of media (e.g., radio and television programs, movies) that are appropriate at this developmental level--- Teacher-made test, oral activities
- **2.4.2** Understands the main plot and main ideas, principal ideas, principal character, in authentic, ability-appropriate written literature --- Teacher-made
- **3.1.1** Presents simple oral reports or presentations about family members and friends, objects present in everyday environment, and common school and home activities
- **3.1.2** Writes short, informal notes or messages that describe or provide information about oneself, friends and family, or school activities --- book test, activities, oral presentation

Benchmark: Level II

- **3.2.1** Presents information orally or in writing in the target language on topics of shared personal interest (e.g., dialogues, compositions, audio or video recorded messages) -- Dialogue, skit
- **3.2.2** Writes various types of texts for a defined audience (e.g., teacher, peers, or pen pal) about topics of personal interest or experience --- book and teacher-made test, activities, diary

Benchmark: Level III

3.3.1 Rephrases and uses indirect expressions to communicate a message in the target language --- Dialogues, skits

3.3.2 Presents information orally or in writing in the target language on topics of shared personal interests (e.g., directed conversations, spontaneous reactions to audio or visual stimuli) --- Dialogue, paired oral activities

Benchmark: Level IV

- **3.4.1** Summarizes the plot and provides brief descriptions of characters in selected poems, short stories or selected reading
- **3.4.2** Presents cultural and literary works in the target language that are appropriate at this developmental level (e.g., performs scenes from plays, recites poems) skits, performances

3.4.3 Effectively communicates orally and in writing, using a variety of vocabulary for past, present and future events and feelings about those events --- Diary, oral
 Standard 4 Demonstrates knowledge and understanding of traditions, ideas and perspectives, institutions, professions, literary and artistic expressions, and other components of target cultures.

Benchmark: Level 1

- **4.1.1** Knows various age-appropriate cultural activities practiced in the target culture (e.g., games, songs, birthday celebrations) --- Checklist
- **4.1.2** Identifies and discusses various aspects of behavior and interaction in various settings in the target culture (e.g., school, family, community) and how these patterns compare to those in one's native culture—Book test
- **4.1.3** Knows familiar utilitarian forms of the culture (e.g., toys, dress types of dwellings, typical foods) and how they compare to those in one's native culture—Book test

Benchmark: Level II

- **4.2.1** Knows various age-appropriate cultural activities practices in the target culture ----Book test, teacher-made test
- **4.2.2** Knows how cultural traditions and celebrations compare with those of the native culture (e.g., holidays, birthdays, "coming of age" celebrations, seasonal festivals, religious traditions, recreational gatherings) --- Book test, teacher-made test
- **4.2.3** Identifies and discusses various aspects of the target culture (educational systems or institutions, means of transportation, and various rules) --- Book test, teacher-made test

Westwood Community Schools Standards and Benchmarks Benchmark: Level III

- **4.3.1** Understands age-appropriate expressive forms of the target culture (e.g., literature, books, periodicals, videos, commercials, and fine arts) --- Teacher-made test
- **4.3.2** Knows how other cultures view our native culture--- Teacher-made test
- **4.3.3** Understands various patterns of behavior or interaction that are typical of one's age groups (e.g., extra-curricular activities, social engagements) --- Teacher-made test
- **4.3.4** Identifies career options that require knowledge of the target culture and proficiency in the target language --- Project

Benchmark: Level IV

- **4.4.1** Knows social, economic, and political institutions of the target culture --- Book test, teacher-made test
- **4.4.2** Understands age-appropriate expressive forms of the target culture (e.g., literature, books, periodicals, videos, commercials, and fine arts) --- Book test, teacher-made test

<u>Standard 5</u> Recognizes that languages use different patterns to communicate and applies this knowledge to develop insight into the nature of language and culture.

Benchmark: Level 1

- **5.1.1** Knows words that have been borrowed from one language to another and how these word borrowings may have developed Teacher-made assessment
- **5.1.2** Knows basic elements of the sound and writing systems of the target language and how these elements differ from the same elements of one's native language Teacher made & book test: oral and written
- **5.1.3** Understands that an idea may be expressed in multiple ways in the target Language Projects, checklist, book and teacher made test

Benchmark: Level 11

5.2.1 Understands how idiomatic expressions have an impact on communication and reflect culture (e.g., anticipates larger units of meaning rather than individual word equivalencies) – Book test, dialogue

5.2.2 Identifies and uses typical patterns of communication in the target language (e.g., cognates and syntax variations) both orally and in written form – book test, dialogue

Benchmark: Level Ill

- **5.3.1** Knows various linguistic elements of the target language (e.g., time, tense) and how these elements compare to linguistic elements in one's native language book & teacher made test, dialogue
- **5.3.2** Uses a bilingual dictionary to select appropriate words for use in preparing Written and oral reports Dialogue, report, worksheet
- **5.3.3** Recognizes how languages differ in the way they can be used to communicate similar ideas (e.g., through oral, written, or artistic expression) Book test, dialogue, teacher-made assessment

Benchmark: Level IV

- **5.4.1** Knows various linguistic elements of the target language (e.g., time, tense) and how these elements compare to linguistic elements in one's native language Book & teacher-made test, dialogue
- **5.4.2** Uses a variety of sources in the target language to obtain information on various topics Project
- **5.4.3** Understands and applies the target language pronunciation, intonation, stress patterns, and writing conventions in a variety of contexts Diary, dialogue, teacher-made & book test
- **5.4.4** Recognizes how languages differ in the way they can be used to communicate similar ideas (e.g., through oral, written, or artistic expression) Book & teacher-made tests, dialogue

General/Instrumental/Elementary Music Standards and Benchmarks

Content Standard I: Expression, performance and production

Students in a fine arts area should have the knowledge and skills to produce, perform, and/or express themselves.

Benchmark I (Grades K-12): The student will demonstrate technical proficiency at the appropriate level.

- The students will utilize the elements of rhythm, melody, harmony, form, tone color, and dynamics.
 - Recognize musical forms
 - Utilize musical symbols that represent concepts
 - Recognize the tone colors of the human voice and the instrument families
 - Use appropriate movement to express musical concepts
- The student will read and perform music of varying styles.
 - Interpret rhythms
 - Perform a melodic line
 - Sing or play songs independently and in tune, utilizing age-appropriate vocal/instrumental techniques
 - Improvise or compromise music through singing and/or playing
 - Compare and contrast music from the past and the present

Benchmark II (Grades K-12): The student will demonstrate the sue of creative expression and communication through music.

- The student will listen to a wide variety of music.
 - Listen for appropriate phrasing, dynamics, tone quality, style and expression
 - Display respect for others' performances with proper concert etiquette
- The student will perform music at an age-appropriate level.
 - Participate in public performances
 - Exhibit the characteristics of a quality performance, such as posture, eye contact, vocal/instrumental technique, stage presence, and stage conduct
 - Respond appropriately to the gestures of a conductor

Benchmark III (Grades K-12): The student will transfer musical skills and knowledge to other disciplines.

- The student will gain confidence by learning to work in a group.
 - o Work independently on assigned solo/group works
 - Recognize that the individual is an essential contributor to the group
- Exhibit the characteristics of a quality performance, such as posture, eye contact, vocal/instrumental technique, stage presence, and stage conduct
- Respond appropriately to the gestures of a conductor

Benchmark IV (Grades K-12): The student will develop an awareness of career opportunities within the field of music.

• The student will recognize the role music plays in the lives of people and how music can influence a career choice

Content Standard II: Analysis and Critique

Students apply higher order thinking skills to analyze and critique in a fine arts area.

Benchmark I (Grades K-12): The student will compare and contrast carious musical examples.

- The students will use the vocabulary and skills required to analyze musical works.
 - Select and defend musical choices based on his/her musical experiences
 - Show tolerance of other's musical choices'
 - o Critique rehearsals and performances of self and others
 - Respond to critiques of oneself with respect

Benchmark II (Grades K-12): The student will understand music as the universal art form.

- The student will demonstrate knowledge of the social and intellectual influences affecting the creation of music.
 - Connect the creating and performing of music to the environmental/social/historical/personal influences of the time

Content Standard III: Aesthetic Perception

Students will develop an emotional connection to, and appreciation of fine arts as a part of their own humanity.

Benchmark I (Grades K-12): The student will be a lifelong consumer of music.

- The student will use and enjoy music in everyday life.
 - Participate in musical activities as a performer
 - Participate in musical activities as an observer or consumer

Westwood Community Schools Standards and Benchmarks Emotional connection? Intrinsic..... What separates the academic portion of the art from the art itself?

Edited November 21, 2007

Health Standards and Benchmarks

Leveled Program Outcomes and Components Elementary Level

I. Community Health Program Outcomes.

a. The student will recognize trends in age-related and general health care and be aware of community health resources and potential involvement

Program Outcomes Components and Leveled Program Outcomes:

The student will:

- Have an awareness of health resources
 - Identify community health services
- Identify trends in medical care
 - Identify current trends in medical care
- Explore age-related health care
 - Discuss health needs as an individual grows
- Become aware of community involvement
 - o Recognize the role of volunteer workers in the community

II. Consumer Health Program Outcome.

b. The student will be able to use the decision making process to select available health services and products,

Program Outcomes Components and Leveled Program Outcomes:

The student will:

- Analyze the accuracies and pressures of advertising

 Identify various health advertisements
- Evaluate the various regulatory agencies and laws that protect against consumer fraud
 - Become aware of various types of consumer protection
- Evaluate the necessity of insurance and the different cost factors
 - Define health insurance and its purpose
- Have knowledge of the numerous health services and products available to the consumer
 - o Explain health products and health services

III. Environment Health Program Outcome.

c. The student will increase awareness and understanding of environmental health issues relation to the protection of our environment.

Program Outcomes Components and Leveled Program Outcomes:

The student will:

- Analyze the effects of various types of environmental conditions on personal health and the health of the planet
 - Discuss actions people can take to protect the environment
 - Discuss wise energy and water usage
- Use knowledge of environment to adopt behavior to protect our environment
 - Name various types of pollution
 - Identify basic causes of pollution
 - Become aware of the amount of waste generated
- Evaluate the correlation of individual, local, national, and international activities on world health.
 - Explain what an ecosystem is

IV. Family Life Education Program Outcome.

d. The student will have knowledge and appreciation of certain rights they have toward self, members of the opposite sex, and family, and realize that individual needs can be met through family systems.

Program Outcomes Components and Leveled Program Outcomes:

The student will:

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- Understand sexuality from birth to death
 - Recognize individual human growth and development patterns
- Understand the process by which life is carried on
 - Understand living things reproduce in different ways
- Describe how the relationships in a family influence health, happiness and harmony in the family unit
 - Identify families and the roles they play
 - Analyze family structures and the various changes that could occur
 - Understand the family is the basic unit of our society

V. Food and Nutrition Program Outcome.

e. The student will have knowledge and skills that insure they can make wise food choices that meet nutritional requirements based on food groups and that help to insure adequate diet and appropriate weight control.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- Have knowledge of healthful food choices
 - \circ Recognize the food groups established in the food guide pyramid
 - Relate nutrition to snacks
 - Recognize the relationship between nutrition and healthy teeth

- Interpret food labels
- Categorize food into the food groups
- Relate disease prevention to good nutrition
- Analyze the major nutritional contribution of each food group
 - Identify the nutrients and their basic functions
 - Recognize sources of key nutrients
- Apply nutritional requirements for self and others
 - Develop balances meal plans
 - Identify effects of food habits on general health
 - Describe energy needs in terms of calories
 - Relate food choices to personal health
 - Evaluate sample menus in terms of food groups, nutrients, and calories/grams
- Evaluate the relationship between diet and weight control.
 - Discuss factors such as age, body size, activity level, and physical conditions that affect basic nutrient and energy requirements
 - Recognize how advertising influences our food choices

VI. Mental and Emotional Health Program Outcome.

f. The student will have the knowledge and skills to develop a positive selfconcept, use techniques to manage stress and maintain good mental health, and use appropriate health services.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- develop and maintain a positive self-concept
 demonstrate a positive self-concept
- analyze causes and effects of stress on self and ways to manage stress
 - distinguish between positive and negative stress and the effects on health
- apply coping skills to better reach optimum emotional mental health
 - define health insurance and its purpose
- investigate the types of assistance given by various mental health services
 - identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc)

VII. Personal and Social Health Outcome.

g. The student will gain self-respect and respect for others through knowledge and positive health habits and choices, emphasizing body maintenance and physical fitness throughout life.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- Recognize positive health habits and choices for body maintenance
 - Know the importance and practice of proper cleanliness, grooming, adequate sleep, and balanced diet for total wellness
 - o Demonstrate healthful sitting and standing posture

- Know the importance of proper dental care
- Identify major body systems
- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - o Understand the relationship between exercise, nutrition, and fitness
 - Recognize the significance of nutrition
 - List the five components of physical fitness (aerobic endurance, body composition, strength, endurance, and flexibility)
 - Demonstrate knowledge of physical readiness to perform fitness skills
 - Know the benefits of lifetime activities
- Exhibit respect for self and others
 - Demonstrate good eating habits and table manners
 - Demonstrate appreciation for the difference in body sizes and shapes of individuals
 - Understand the ways to make, keep and be a friend

VIII. Prevention and Control of Disease Program Outcome.

h. The student will have knowledge of the disease process, know when and how to seek diagnosis, comprehend the methods of treatment and evaluate personal responsibilities of disease.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss he means by which disease is spread
 - Identify behaviors that prevent disease
- Evaluate the changes in the body systems and structure resulting from disease
 - Describe factors identifying a person who is unhealthy
 - List common infectious and non-in factious diseases
- Recognize various appropriate treatment methods
 - Recognize the use and purpose of medicine
- Assess the relationship of short-term and long-term effects of daily choices to personal health and well-being
 - o Identify habits that may increase or decrease the risk of disease
 - Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills Program Outcome.

i. The will know first aid emergency health care, demonstrate individual safety precautions, and understand the causes of accidents.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- Know first aid emergency health care
 - Know first aid for minor injuries (scratches, nose bleed, burns, etc)
 - Know what to do when clothing catches on fire

• Demonstrate how to find emergency care in case of an accident

- Understand the causes of accidents and the application of safety precautions
 - Be able to read and obey traffic signs
 - \circ $\;$ Use established routes to escape fires in school and home
 - o Know safety rules regarding motorized vehicles and bicycles
 - List telephone numbers for emergencies and practice dialing
 - \circ $\,$ Practice saying "No" to pressures concerning high and low risk behaviors
 - \circ Know the dangers and methods when dealing with strangers
 - Demonstrate ways to protect self during storms, earthquakes, flooding, or other natural disasters
 - Practice safety belt protection
 - o Understand water safety precautions
 - Understand the concept of child abuse
 - o Understand safety precautions at home, i.e., electrical appliances

X. Substance Nonuse, Use, and Abuse Program Outcome.

j. The student will acquire information regarding the effects of substance use and abuse by applying decision making skills.

Program Outcome Components and Leveled Program Outcomes:

The student will:

- Understand the importance of positive decision making in the use of drugs
 - Explain the necessity of sound decisions concerning the use of any drug
- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems and that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong an harmful use of substances

Kindergarten

- I. Community Health
- **II.** Consumer Health

III.Environmental Health

IV. Family Life Education

- Describe how the relationships in a family influence health, happiness, and harmony in a family unit
 - Identify families and the roles they play

V. Food and Nutrition

- Apply nutritional requirements for self and others
 - Identify effects of food habits on general health
 - Relate food choices to personal health

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self-concept
- Apply coping skills to better reach optimum emotional mental health
 - Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc.)

VII. Personal and Social Health

- Recognize positive health habits and choices for body maintenance
 - Know the importance and practice of proper cleanliness, grooming, adequate sleep, and balanced diet for total wellness
 - Know the importance of proper dental care
- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - Recognize the significance of nutrition
- Exhibit respect for self and others
 - Demonstrate good eating habits and table manners
 - Demonstrate appreciation for the difference in body sizes and shapes of individuals
 - Understand ways to make, keep, and be a friend

VIII. Prevention and Control of Disease

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - o Identify behaviors that prevent disease
- Recognize various appropriate treatment methods
 - Recognize the use and purpose of medicine
- Assess the relationship of short-term and long-term effects of daily choices to personal health and well-being
 - Identify habits that may increase or decrease the risk of disease
 - o Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Understand the causes of accidents and the application of safety precautions
 - Use established routes to escape fires in school and home
 - List telephone numbers for emergencies (911)
 - Know the dangers and methods when dealing with strangers

X. Substance, Nonuse, Use and Abuse

- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong and harmful use of substances

First Grade

I. Community Health

II. Consumer Health

III. Environmental Health

IV. Family Life Education

V. Food and Nutrition

- Have knowledge of healthful food choices
 - Relate nutrition to snacks
 - Recognize the relationship between nutrition and healthy teeth

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self-concept
- Apply coping skills to better reach optimum emotional mental health
 - Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc)

VII. Personal and Social Health

- Recognize positive health habits and choices for body maintenance
 Know the importance of proper dental care
- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - Recognize the significance of nutrition
- Exhibit respect for self and others
- Demonstrate appreciation for the differences in body sizes and shapes of individuals
- Understand ways to make, keep and be a friend

VIII. Prevention and Control of Disease

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- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - \circ $\;$ Discuss the means by which disease is spread
 - o Identify behaviors that prevent disease
- Recognize various appropriate treatment methods
 - Recognize the use and purpose of medicine

IX. Safety and Survival Skills

- Know first aid emergency health care
 - Know what to do when clothing catches on fire
- Understand the causes of accidents and the application of safety precautions
 - Use established routes to escape fires in schools and home

X. Substance nonuse, use and abuse

- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong and harmful use of substances

Second Grade

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I. Community Health

II. Consumer Health

III. Environmental Health

IV. Family Life Education

- Describe how the relationships in a family influence health, happiness, and harmony in the family unit
 - Identify families and the roles they play

V. Food and Nutrition

- Have knowledge of healthful food choices
 - Relate disease prevention to good nutrition
- Apply nutritional requirements for self and others
 - Identify effects of food habits on general health
 - Relate food choices to personal health

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self-concept
 - Apply coping skills to better each optimum emotional mental health • Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources for help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc)

VII. Personal and Social Health

- Exhibit respect for self and others
 - Demonstrate appreciation for the difference in body sizes and shapes of individuals
 - o Understand ways to make, keep, and be a friend

VIII. Prevention and Control of Disease

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - Identify behaviors that prevent disease
- Recognize various appropriate treatment methods
 - Recognize the use and purpose of medicine
- Assess the relationship of short-term and long-term effects of daily choices to personal health and well-being
 - Identify habits that may increase or decrease the risk of disease
 - o Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Know the first aid emergency health care
 - Know what to do when clothing catches on fire
- Understand the causes of accidents and the application of safety precautions
 - \circ $\;$ Used established routes to escape fires in schools and home $\;$
 - Understand safety precautions at home, e.g., electrical appliances

X. Substance Nonuse, Use and Abuse

Third Grade

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- I. Community Health
- II. Consumer Health

III. Environmental Health

IV. Family Life Education

- Describe how the relationships in a family influence health, happiness, and harmony in the family unit
 - Identify families and the roles they play
 - Analyze family structures and the various changes that could occur
 - Understand the family is the basic unit of our society

V. Food and Nutrition

- Have knowledge of healthful food choices
 - Recognize the food groups established in the food quide pyramid
 - Relate nutrition to snacks

- Recognize the relationship between nutrition and healthy teeth
- Relate disease prevention to good nutrition
- Analyze the major nutritional contribution of each food group
 - Identify the nutrients and their basic functions
 - Recognize sources of key nutrients
- Apply nutritional requirements for self and others
 - Identify effects of food habits on general health
 - Relate food choices to personal health

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self-concept
- Apply coping skills to better reach optimum emotional mental health
 - Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc)

VII. Personal and Social Health

- Recognize positive health habits and choices for body maintenance
 - Know the importance and practice of proper cleanliness, grooming, adequate sleep, and balanced diet for total wellness
 - Know the importance of proper dental care
- Recognized the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - Understand the relationship between exercise, nutrition, and fitness
 - Recognize the significance of nutrition
- Exhibit respect for self and others
 - Demonstrate appreciation for the difference in body sizes and shapes of individuals
 - Understand ways to make, keep and be a friend

VIII. Prevention and Control of Disease

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - Identify behaviors that prevent disease
- Evaluate the changes in the body systems and structure resulting from disease
 - List common infectious and non-infectious diseases
- assess the relationship of short-term and long-term effects of daily choices to personal health and well-being
 - o identify habits that may increase or decrease the risk of disease
 - o understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Know first aid emergency health care
 - Know first aid for minor injuries (scratches, nose bleed, burns, etc)
 - Know what to do when clothing catches on first
 - \circ $\,$ Demonstrate how to find emergency care in case of an accident
- Understand the causes of accidents and the application of safety precautions o

X. Substance Nonuse, Use, and Abuse

- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems and that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong and harmful use of substances

Fourth Grade

I. Community Health

- Have an awareness of health resources
 - Identify community health services
- Explore age-related health care
 - Discuss health needs as an individual grows

II. Consumer Health

- Analyze the accuracies and pressures of advertising
 - Identify various health advertisements
- Have knowledge of the numerous health services and products available to the consumer
 - o Explain health products and health services

III.Environmental Health

- Analyze the effects of various types of environmental conditions on personal health and the health of the planet
 - Discuss actions people can take to protect the environment
 - o Discuss wise energy and water usage

IV. Family Life Education

- Describe how the relationship in a family influence health, happiness, and harmony in the family unit
 - Identify families and the roles they play
 - Analyze family structures and the various changes that could occur
 - Understand the family is the basic unit of our society

V. Food and Nutrition

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- Have knowledge of healthful food choices
 - Recognize the food groups established in the food guide pyramid

- Relate nutrition to snacks
- Recognize the relationship between nutrition and healthy teeth
- Interpret food labels
- Categorize food into the food groups
- Relate disease prevention to good nutrition
- Analyze the major nutritional contribution of each food group
 - Identify the nutrients and their basic function
 - Recognize sources of key nutrients
- Apply nutritional requirements for self and others
 - Develop balanced meal plans
 - Identify effects of food habits on general health
 - Describe energy needs in terms of calories

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self concept
- Analyzes causes and effects of stress on self and ways to manage stress
 - Distinguish between positive and negative stress and the effects on health
- Apply coping skills to better reach optimum emotional mental health
 Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc)

VII. Personal and Social Health

- Recognize positive health habits and choice for body maintenance
 - Know the importance and practice of proper cleanliness, grooming, adequate sleep, and balanced diet for total wellness
 - Demonstrate healthful sitting and standing posture
 - Know the importance of proper dental care
 - Identify major body systems
- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - o Understand the relationship between exercise, nutrition, and fitness
 - Recognize the significance of nutrition
- Exhibit respect for self and others
 - Demonstrate good eating habits and table manners
 - Demonstrate appreciation for the difference in body sizes and shapes of individuals
 - Understand ways to make, keep and be a friend

VIII. Prevention of Control of Disease

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - Identify behaviors that prevent disease

- Evaluate the changes in the body systems and structure resulting from disease
 - Describe factors identifying a person who is unhealthy
 - List common infectious and non-infectious diseases
- Recognize various appropriate treatment methods
 - Recognize the use and purpose of medicine
- Assess the relationship of short-term and long-term effects on daily choices to personal health and well-being
 - \circ $\;$ Identify habits that may increase or decrease the risk of disease
 - o Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Understand the causes of accidents and the application of safety precautions
 - Use established routes to escape fires in school and home
 - Practice says "No" to pressures concerning high and low risk behaviors

X. Substance Nonuse, Use and Abuse Program

- Understand the importance of positive decision making in the use of drugs
 - Explain the necessity of sound decisions concerning the use of any drug
- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems and that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong and harmful use of substances

Fifth Grade

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I. Community Health

II. Consumer Health

- Analyze the accuracies and pressures of advertising
 - Identify various health advertisements
- Evaluate the various regulatory agencies and laws that protect against consumer fraud
 - o Become aware of various types of consumer protection

III.Environmental Health

- Analyze the effects of various types of environmental conditions on personal health and the health of the planet
 - Discuss actions people can take to protect the environment
 - Discuss wise energy and water usage
- Use knowledge of environment to adopt behavior to protect our environment
 - \circ Name various types of pollution
 - Identify basic causes of pollution

IV. Family Life Education

- Understand sexuality from birth to death
 - Recognize individual human growth and development patterns
- Describe how the relationships in a family influence health, happiness, and harmony in the family unit
 - Identify families and the roles they play

V. Food and Nutrition

- Have knowledge of healthful food choices
 - Recognize the food groups established in the food guide pyramid
 - Relate nutrition to snacks
 - Interpret food labels
 - Categorize food into the food groups
- Analyze the major nutritional contribution of each food group
 - Identify the nutrients and their basic function
- Apply nutritional requirements for self and others
 - Develop balanced meal plans
 - o Identify effects of food habits on general health
 - Relate food choices to personal health
 - Evaluate the relationships between diet and weight control
 - Recognize how advertising influences our food choices

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - Demonstrate a positive self-concept
- Analyze causes and effects of stress on self and ways to manage stress
 - Distinguish between positive and negative stress and the effects on health
- Apply coping skills to better reach optimum emotional mental health
 - Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc.)

VII. Personal and Social Health

- Recognize positive health habits and choices for body maintenance
 - o Identify major body systems
- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - \circ $\;$ Understand the relationship between exercise, nutrition, and fitness
 - o Demonstrate knowledge of physical readiness to perform fitness skills
 - Know the benefits of lifetime activities
- Exhibit respect for self and others
 - Understand ways to make, keep, and be a friend

VIII. Prevention and Control of Disease

- Appraise the process by which disease enters the body
 - Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - Identify behaviors that prevent disease
- Evaluate the changes in the body systems and structure resulting from disease
 - Describe factors identifying a person who is unhealthy
 - o List common infectious and non-infectious diseases
- Assess the relationship of short-term and long-term effects on daily choices to personal health and well-being
 - o Identify habits that may increase or decrease the r isk of disease
 - Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Understand the causes of accidents and the application of safety precautions
 - Use established routes to escape fires in schools and homes
 - Practice saying "No" to pressures concerning high and low risk behaviors

X. Substance Nonuse, Use and Abuse

- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems and that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse
 - Recognize the hazards of wrong and harmful use of substances

Sixth Grade

- I. Community Health
- Have an awareness of health resources
 - Identify community health services
- Explore age-related health care
 - Discuss health needs as an individual grows

II. Consumer Health

- Analyze the accuracies and pressures of advertising
 - o Identify various health advertisements
- Evaluate the various regulatory agencies and laws that protect against consumer fraud
 - o Become aware of various types of consumer protection
- Have knowledge of the numerous health services and products available to the consumer
 - Explain health products and health services

III. Environmental Health

IV. Family Life Education

- Understand sexuality from birth to death
 - Recognize individual human growth and development patterns
- Understand the process by which life is carried on
 - Understand living things reproduce in different ways
- Describe how the relationships in a family influence health, happiness, and harmony in the family unit
 - Identify families and the roles they play
- Analyze family structures and the various changes that could occur
 - Understand the family is the basic unit of our society

V. Food and Nutrition

- Have knowledge of healthful food choices
 - Recognize the food groups established in the food guide
 - Relate nutrition to snacks
 - Recognize the relationship between nutrition and healthy teeth
 - Interpret food labels
 - Categorize food into the food groups
 - Relate disease prevention to good nutrition
- Analyze the major nutritional contribution of each food group
 - Identify the nutrients and their basic function
 - Recognize sources of key nutrients
- Apply nutritional requirements for self and others
 - Identify effects of food habits on general health
 - Relate food choices to personal health
- Evaluate the relationships between diet and weight control
 - Discuss factors such as age, body size, activity level, and physical conditions that affect basic nutrient and energy requirements

VI. Mental and Emotional Health

- Develop and maintain a positive self-concept
 - o Demonstrate a positive self-concept
- Analyze causes and effects of stress on self and ways to manage stress
 Distinguish between positive and negative stress and the effects on health
- Apply coping skills to better reach optimum emotional mental health
 Express emotions appropriately
- Investigate the types of assistance given by various mental health services
 - Identify sources of help for self with emotional difficulties (police, teachers, parents, counselors, clergy, etc.)

VII. Personal and Social Health

- Recognize positive health habits and choices for body maintenance
 - Know the importance and practice for proper cleanliness, grooming, adequate sleep, and balanced diet for total wellness
 - Know the importance of proper dental care
 - Identify major body systems

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- Recognize the relationship between physical fitness and healthy lifestyles
 - Know the importance of exercise
 - Understand the relationship between exercise, nutrition, and fitness
 - Recognize the significance of nutrition
 - List the five components of physical fitness (aerobic endurance, body composition, strength, endurance, and flexibility)
 - Demonstrate knowledge of physical readiness to perform physical fitness skills
 - Know the benefits of lifetime activities
- Exhibit respect for self and others
 - Understand ways to make, keep and be a friend

VIII. Prevention and Control of Disease

- Appraise the process by which disease enters the body
 - o Identify habits for maintaining optimal health
 - Discuss the means by which disease is spread
 - Identify behaviors that prevent disease
- Evaluate the changes in the body systems and structure resulting from disease.
 - Describe factors identifying a person who is unhealthy
 - List common infectious and non-infectious diseases
- Assess the relationship of short-term and long-term effects of daily choices to personal health and well-being
 - o Identify habits that may increase or decrease the risk of disease
 - Understand immunizations and other ways to prevent illness

IX. Safety and Survival Skills

- Know first aid emergency health care
 - Know first aid for minor injuries (scratches, nose bleed, burns, etc.)
 - o Demonstrate how to find emergency care in case of an accident
- Understand the causes of accidents and the applications of safety precautions
 - Be able to read and obey traffic signs
 - Use established routes to escape firs in schools and homes
 - o Know safety rules regarding motorized vehicles and bicycles
 - Practice saying "No" to pressures concerning high and low risk behaviors
 - Know the dangers and methods when dealing with strangers
 - Practice safety belt protection
 - o Understand water safety precautions
 - Understand safety precautions at home, e.g., electrical appliances

X. Substance Nonuse, Use and Abuse

- Understand the importance of positive decision making in the use of drugs
 - Explain the necessity of sound decisions concerning the use of any drug
- Recognize substance abuse and explore the availability of various services
 - Realize that all people have problems and that it is appropriate to ask for help
- Understand the risks and consequences of substance use and abuse

Secondary Level

<u>Standard 1</u>: Know and be able to recognize trends in age-related and general health care and be aware of community health resources and potential environment.

- Have an awareness of health resources and be able to demonstrate the skills for locating, evaluating, and using community health resources
- Identify trends in medical care and be able to analyze current trends in medical care
- Explore age-related health care and be able to analyze current trends in medical care
- Know and become aware of community environment
- Investigate how people work together to solve global health care needs

<u>Standard 2</u>: Understand the decision making process to select available health services and products, become aware of the consumer laws that protect them, and analyze various advertising technique and health insurance.

- Analyze the accuracy and pressures of advertising
- Evaluate the various regulatory agencies and laws that protect against consumer fraud
- Analyze the benefits and limitations of agencies in regulating the production and distribution of health products and services
- Explain the cost in relation to different types of coverage
- Evaluate the necessity of insurance and the different types of coverage
- Have knowledge of the numerous health services and products available to the consumer
- Analyze products and services in terms of costs, quality, and availability.

<u>Standard 3</u>: Understand the awareness and understanding of environment health issues relating to protection of our environment.

- Analyze the effects of various types of environmental conditions on personal health and the health of the planet
- Use knowledge of the environment to adopt behavior to protect our environment
- Evaluate the correlation of individual, local, national, And international activities on world health
- Develop a plan for reducing pollution
- Assess attempts to control effects of negative environmental conditions
- Identify agencies and their functions that deal with environmental health
- Predict the outcome of overpopulation on the world ecosystem

Standard 4: Understand the knowledge and appreciation of certain rights and responsibility they have toward self, members of the opposite sex, the family, and realize that individual needs can be met through family systems.

- Understand sexuality from birth to death
- Recognize sexual relationships involve many responsibilities and consequences
- Understand the process by which life is carried on
- Analyze prenatal growth and many factors that could affect the unborn child
- Examine factors that will develop strong family relationships
- Analyze family structures and that various changes could occur
- Describe how the relationships in a family influence health, happiness, and harmony in the family unit
- Analyze family situations and ways of coping

<u>Standard 5</u>: knows that knowledge and skills will insure that they will make wise food choices and meet nutritional requirements based on the food groups.

- Have knowledge of healthy food choices
- Design food plans that satisfy the nutritional requirements
- Analyze the major nutritional contribution of each food group
- Know the role of nutrients in contributing to and/or preventing disease
- Know the role of each nutrient in maintaining good health
- Apply nutritional requirements for self and others
- Know the meaning of RDA and its application in planning a diet
- Know the special nutritional needs of special populations
- Know the nutritional requirements for healthy teens and other individuals as described by the dietary guide
- Know the relationship between diet and weight control
- Develop safe and healthy ways on controlling body weight
- Evaluate fad diets and their effects on the individual
- Identify resources in the community for gathering reliable nutritional information, counseling and treatment

Standard 6: Understand the knowledge and skills to develop a positive self-concept, use techniques to manage stress and maintain good mental health, and use appropriate health services.

- Develop and maintain a positive self-concept
- Analyze causes and effects of stress on self and ways to manage stress
- Demonstrate ways to cope with and manage stress
- Apply coping skills to better reach optimum emotional mental health
- Distinguish warning signs of deteriorating mental health
- Analyze one or more emotions and select acceptable ways of expressing them consistent with a healthy lifestyle
- Recognize the therapeutic value of personal relationships, peer support groups, and community resources

Standard 7: Understand that self-respect and respect for others through knowledge of positive health habits and choices, emphasizing body maintenance and physical fitness throughout life.

- Recognize positive health habits and choices for body maintenance
- Design and implement a personal health plan which can be adaptable to changing lifelong needs
- Understand total wellness as including mental, social, and bond structure
- Understand the relationships between ideal body weight, height and bone structure
- Recognize the relationship between physical fitness and healthy lifestyles
- Demonstrate knowledge of a complete workout
- Analyze the benefits of specific exercises
- Illustrate the impact of specific exercise on th various body parts
- Develop the ability to communicate effectively to resolve conflicts and form new friendships
- Develop a healthy self concept and respect for others

<u>Standard 8</u>: Understand the disease process, know when and how to seek diagnosis, comprehend the methods of treatment, and evaluate personal responsibilities in the prevention of disease.

- Understand the process by which disease enters the body
- Describe the factors that create epidemics
- Know the influences of personal, environment, and generic causes of disease
- Evaluate the changes in the body systems and structure resulting from disease
- Recognize various appropriate treatment methods
- Know how to employ the methods of self-detection of various diseases
- Contrast patient's rights versus community rights related to disease and treatment
- Analyze the dying process and its accompanying diseases
- Survey individual health risks
- Cite resources and service agencies related to disease

<u>Standard 9:</u> Know first aide emergency health care, demonstrate individual safety precautions, and understand the causes of accidents.

- Explain the procedures and uses of CPR and the Heimlich maneuver
- Analyze techniques for first aid for shock, wounds, cuts, poisoning, bleeding, burns, fainting, fracture, nose bleed, frostbite, and hypothermia
- Evaluate prevention and treatment of sunburn, heat exhaustion and heat stroke
- Understand the cause of accidents and the application of safety precautions
- Know the baby sitting guides
- Know the various plans for protection from storms, earthquakes, and flooding
- Understand the dangers of drinking and driving
- Understand the safety belt laws
- Analyze safety rules regarding motorized vehicles, bicycles, and mechanical equipment
- Know the causes of abuse

- Understand the water safety instruction can prevent accidents
- Know the methods of extinguishing fires and fire safety

<u>Standard 10:</u> Knows the process to acquire information regarding the effects of substance use and abuse by applying decision making skills.

- Understand the importance of positive decision making in the use of drugs
- Evaluate the relevance of self-image for good decision making about drugs
- Recognize substance abuse an explore the availability of various treatment programs
- Evaluate substance use and abuse situations and select appropriate response and/or services
- Understand the risks and consequences of substance use and abuse
- Know the effects of drug use on individuals, families, and society

Industrial Technology Standards and Benchmarks

April 8, 2002

Advanced Woodworking

Standards and Benchmarks

Standard 1-Advanced Woodworking

Standard 1	Understands and applies concepts of measuring and mathematics.
1.1.AW	Understands how to estimate units for a wood cabinet cost estimation-
	Written bill of materials filled out for semester's expenses

Standard 2-Advanced Woodworking

Standard 2 setting.	Understands and follows the process of working safely in a shop
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2.1.A W	Operates tools and machines in the wood shop area safely-Observation
2.2.AW	Works with people in a cooperative and safe manner-Observation

Standard 3-Advanced Woodworking

Standard 3 Understands and follows written and oral directions.

3.1A W Reads and makes a plan of procedure for a project-Blue prints for semester's projects 3.2.AW Listens, takes notes and follows directions given orally by the teacher-Observation

Standard 4-Advanced Woodworking

Standard 4	Makes effective use of tools and machines.
4.1.AW	Shows the safe operation of tools and machines in the wood shop-
Observation 4.2.AW	Uses work space effectively-Observation

Standard 5-Advanced Woodworking

Standard 5 of a project.	Understands and applies key concepts that lead to the construction
5.1.A W Observation	Designs a project containing appropriate joints and materials-

5.2.AW	Uses tools and machines with effective jigs and fixtures to enhance the
	production of projects Observation
5.3.AW	Assembles a project with fasteners that will be square and meet the blue
	print specs to within 1/16 inch-Observation

5.4. AW Knows the proper method for finishing a wooden project-Observation

Standard 6-Advanced Woodworking

Standard 6 Understands what the past, present, and future impact technological jobs will have in a global society.

Not applicable

Construction

Standards and Benchmarks

Standard 1-Construction

Standard 1	Understands and applies concepts of measuring and mathematics.
1.1.C.1	Reads and measures with a ruler to 1/16 inch accuracy-Written test on
ruler use	
1.2.C.1	Understands how to estimate units for building materials-Written quiz on formulas to estimate unit of building materials

Standard 2-Construction

Standard 2	Understands and follows the process of working safely in a shop
setting. 2.1.C.1	Operates tools and machines on the job site safely-Observation
2.2.C.1	Works with people in a cooperative and safe manner-Observation

Standard 3-Construction

Standard 3	Understands and follows written and oral directions.
3.1.C.1	Reads a plan or blue print for a project-Observation
3.2.C.1	Listens, takes notes and follows directions given orally by the teacher- Observation.

Standard 4-Construction

Standard 4	Makes effective use of tools and machines.
4.1.C.1	Names tools and machines (and parts) on the job site-Written quiz
4.2.C.1	Shows the safe operation of tools and machines on the job site-
Observation 4.3	C.1 Uses work space effectively-Observation

Standard 5-Construction

Standard 5	Understands and applies key concepts that lead to the construction of a project.
5.1.C.1 Observation	Designs a project containing appropriate joints and materials-
5.2.C.1	Uses effective jigs and fixtures to enhance the production of projects- Observation

5.3.C.1 Assembles a project with appropriate fasteners that will be square and meet the blue print specs to within 1/16 inch-Observation

Construction Trades

<u>Standard CT-1:</u> Understand problem solving, analysis, and decision-making in agriculture.

Benchmark: Analyze situation, use problem-solving approach and make appropriate decisions.

- Measure and trouble shoot electrical circuits (to include charging and starting systems) using a circuit test
- Identify environmental problems in agricultural structures such as livestock building and chemical storage facilities
- Plan and evaluate farmstead and agricultural building design and layout
- Sketch a simple line drawing of a three dimensional object showing top, bottom, and front views

<u>Standard CT-2</u>: Understand leadership and ethics development in agriculture.

Benchmark: Apply principles of leadership and ethical behavior to selected situations in agriculture.

- Take responsibility for mistakes and/or good work
- Become personally involved in a professional organization
- Manage time effectively
- Demonstrate initiative
- Recognize relevant, ethical issues in business
- Manage conflict (personal and customer)
- Delegate duties

<u>Standard CT-3</u>: Understand the concept of cooperation and community service/teamwork.

Benchmark: Demonstrate cooperation and teamwork skills

- Facilitate group interactions (teamwork)
- Follow rules and regulations
- Work effectively with others
- Follow directions
- Comply with safety and health rules
- Utilize equipment correctly as shown/demonstrated by a supervisor
- Cooperate with others
- Interact with others in a courteous and tactful manner
- Develop positive community relations
- Accept supervision willingly

- Ask for help when needed
- Explain the relationship between public and private sectors

Standard 6 Understands what the past, present, and future impact technological jobs will have in a global society.

- 6.1.C.1 Knows the career opportunities in the construction areas-Written
- 6.2.C.1 Knows how people, supplies, and materials function in industry-Written

Electricity/Electronics Standards and Benchmarks

Standard 1-Electricity/Electronics

Standard 1	Understands and applies concepts of measuring and mathematics.
1.1.EE	Reads and measures with a ruler to 1/16 inch accuracy-Written test on
ruler use	
1.2.EE	Solve mathematical problems related to electronics (e.g., Ohm's law). –
	Written Test and handouts.
1.3.EE	Measure parts with precision tools (metric and English).

Standard 2-Electricity/Electronics

Standard 2	Understands and follows the process of working safely in a shop
setting.	
2.1.EE	Operates tools and machines in the shop safely-Observation

2.2.EE Works with people in a cooperative and safe manner-Observation

Standard 3-Electricity/Electronics

Standard 3 Understands and follows written and oral directions.

- 3.1.EE Reads a schematic or blue print for a project-Observation
- 3.2.EE Listens, takes notes and follows directions given orally by the teacher-

Observation.

Standard 4-Electricity/Electronics

Standard 4 Makes effective use of tools and machines.

4.1.EE Shows the safe operation of tools and machines in the electronics shop-Observation

4.2.EE Uses work space effectively-Observation

4.3.EE Use basic shop skills of stripping wire, soldering, de-soldering, IC sockets, and assembling connectors.

4.4.EE Use basic power and hand tools associated with electronic and electrical service.

Standard 5-Electronics/Electricity

Standard 5 Understands Basic Electronic Concepts

westwood Commi	anty Schools Standards and Benchmarks
5.1.EE	Interpret component identifiers (i.e., color codes, manufacturers, and
type number).	
5.2.EE	Explain the relationships between energy, power and work.
5.3.EE	Remove and replace components on printed circuit boards using soldering and de- soldering equipment.
5.4.EE	Write technical reports, whim document methods, results, and
conclusions.	
5.5.EE	Identify specific characteristics of various electronic devices using manufacturers' reference manuals.
5.6.EE	Diagnose malfunctions of electrical systems using test and measurement equipment (i.e., fuses, circuit breaks, relay and solenoid failure, etc.)
5.7.EE	Explain the importance of preventative maintenance and the recording of repair activities.

Standard 6-Electronics/Electricity

Standard 6 Understand and demonstrate the basic concept of DC Circuits.

6.1.EE	Explain the concepts of DC current.
6.2.EE	Demonstrate an understanding of sources of electricity in DC circuits.
6.3.EE	Demonstrate an understanding of principles and operation of batteries.
6.4.EE	Demonstrate an understanding of measurement of resistance of
	conductors and insulators and the computation of conductance.
6.5.EE	Demonstrate an understanding of magnetic properties of circuits and
devices.	
6.6.EE	Explain the basic circuit components of resistance, capacitance and
inductance.	
6.7.EE	Analyze, construct and troubleshoot series, parallel, and series-parallel
circuits.	
6.8.EE	Explain Ohms law (R=E/I) and the variables of resistance, voltage and
current.	
6.9.EE	Analyze, construct and troubleshoot resistance x inductance (RL),
	resistance x inductance x capacitance (RLC) circuits.
6.10.EE	Explain the power formula (P=EI) and the variables of power, voltage
and current.	

Standard 7-Electronics/Electricity

Standard 7	Understand and demonstrate the basic concepts of AC Circuits.
7.1.EE	Analyze, construct, and trouble shoot resistance x capacitance (RC),
	resistance x inductance (RL), resistance x inductance x capacitance
	(RLC) circuits.
7.2.EE	Explain the power formula (P=EI) and the variables of power, voltage
and current.	7.3.EE Demonstrate an understanding of sources of electricity in AC
circuits.	
7.4.EE	Demonstrate an understanding of the properties of an AC signal.
7.5.EE	Demonstrate an understanding of basic motor / generator theory and
operation.	

- 7.6.EE Demonstrate an understanding of measurement of power in AC circuits.
- 7.7.EE Demonstrate an understanding of the principles of operation of safety grounding systems: (lightning arresters, ground fault interrupters, etc.).

Standard 8-Electronics/Electricity

- Standard 8 Understand and demonstrate the basic techniques of analog circuits.
- 8.1.EE Set up and operate frequency counters, signal generators, oscilloscopes, multi-meters and power supplies.
- 8.2.EE Identify basic principles of electric motor operations.

Standard 9-Electronics/Electricity

Standard 9 state devices.	Understand and demonstrate the basic techniques of discrete solid
9.1.EE	Explain the characteristics of PNP, NPN, and FET transistors including amplification, saturation and cut-off.
9.2.EE	Analyze, construct, and troubleshoot simple common base, common emitter, and common collector transistor amplifiers using a schematic.
9.3.EE principles.	Identify optoelectronic and fiber optic devices and explain their operating

Standard 10-Electronics/Electricity

Standard 10	Understand and demonstrate the basic components of digital circuits.
10.1.EE	Explain the concept of integrated circuits.
10.2.EE	Analyze and troubleshoot basic digital logic gate integrated circuits using
a schematic.	
10.3.EE	Analyze, construct and troubleshoot basic digital circuits (i.e., flip-flops
	counters, registers, etc.)
0. 1 111 1	

Standard 11-Electronics/Electricity

Standard 11 Understands what the past, present, and future impact technological jobs will have in a global society.

7.1.TD	Know	s the ca	reer opp	ortunitie	es in the	e Elect	roni	c are	eas	-W	ritten	
		-	-		-						-	

7.2.TD Knows how people, supplies, and materials function in industry-Written

Technical Drawing Standards and Benchmarks

Standard 1-Technical Drawing

Standard 1	Understands and applies concepts of measuring and mathematics.
1.1.TD	Reads and measures with a ruler to 1/16 inch accuracy-Written test on
ruler use	
1.2.TD	Solve mathematical problems related to drafting (e.g., conversion of units). –Observation
1.3.TD	Use architectural, metric, civil, and mechanical engineer's scales and demonstrate scaling techniques.

Standard 2-Technical Drawing

Standard 2 setting.	Understands and follows the process of working safely in a shop
2.1.TD	Operates tools and machines on the job site safely-Observation
2.2.TD	Works with people in a cooperative and safe manner-Observation
Standard 3-Tec	hnical Drawing
Standard 3	Understands and follows written and oral directions.
3.1.TD	Reads a plan or blue print for a project-Observation
3.2.TD	Listens, takes notes and follows directions given orally by the teacher-

Observation.

Standard 4-Technical Drawing

Standard 4	Understands and uses basic drafting techniques.
4.1.TD	Use and maintain basic drafting equipment and machines.
4.2.TD	Identify and draw the various line types.
4.3.TD	Demonstrate correct lettering techniques (freehand or CAD)
4.4.TD	Reproduce drawings (e.g., blueprints and plots).
4.5.TD	Prepare drawings / designs using appropriate media
4.6.TD	Perform basic geometric constructions
4.7.TD	Construct and bisect lines, arcs, and angles.
4.8.TD	Draw orthographic views and transfer features.
4.9.TD	Freehand sketch orthographic and pictorial views.
4.10.TD	Apply basic dimensioning techniques.
4.11.TD	Construct basic sectional views.
4.12.TD	Construct isometric, oblique and one and two point perspective
drawings.	
4.13.TD	Construct drawings of primary and secondary auxiliary views.

Standard 5-Technical Drawing

Standard 5 Use computer and peripheral devices to aid in the documentation for design projects.

8 F J	
5.1.TD	Demonstrate basic CAD operations.
5.2.TD	Demonstrate proper care and maintenance of CAD equipment and
software.	
5.3.TD	Demonstrate proficiency in creating two-dimensional CAD drawings.
5.4.TD	Demonstrate proficiency in creating three-dimensional CAD drawings.
5.5.TD	Demonstrate proficiency in three-dimensional CAD modeling.

Standard 6-Technical Drawing

Standard 6	Understands and applies key skills that lead to the construction of a
	project.
6.1.TD	Designs a project containing appropriate drawings with dimensions-

Observation

6.2.TD	Uses effective jigs and fixtures to enhance the production of projects- Observation	

6.3.TD Assembles a project with appropriate fasteners that will be square and meet the blue print specs to within 1/16 inch-Observation

Standard 7-Technical Drawing

Standard 6 Understands what the past, present, and future impact technological jobs will have in a global society.

7.1.TD Knows the career opportunities in the Drafting areas-Written 7.2.TD Knows how people, supplies, and

Woodworking

Standards and Benchmarks

Standard 1-Woods I

Standard 1Understands and applies concepts of measuring and mathematics.1.1.W1.1Reads and measures with a ruler to 1/16 inch accuracy-Written test onruler useruler

1.2.W1.1 Adds, subtracts, multiplies, divided in both whole numbers and fractions-written test on number manipulation

1.3.W1.1 Fills out a bill of materials to determine cost of a project-Written bill of

materials for semester's expenses

Standard 2-Woods I

Standard 2 setting.	Understands and follows the process of working safely in a shop
2.1.W1.1	Operates tools and machines in the wood shop area safely-Observation
2.2.W1.1	Works with people in a cooperative and safe manner-Observation

Standard 3-Woods I

3.1.W1.1 Reads and writes a plan of procedure for a project-Written copy plan of procedure given orally

3.2.W1.1 Listens, takes notes and follows directions given orally by the teacher-Observation

Standard 4-Woods I

Standard 4	Makes effective use of tools and machines
4.1.W1.1	Names tools and machines (and parts) in used in the wood shop-Written
quiz	
4.2.W1.1	Shows the safe operation of tools and machines in the wood shop-
Observation	
4.3.W1.1	Uses work space effectively-Observation

Standard 5Woods I		
Standard 5 of a project.	Understands and applies key concepts that lead to the construction	
5.1.W1.1	Designs a project containing appropriate joints and materials-Draws plan for puzzle project	
5.2.W1.1	Develops and refines a drawing for a project-Draws with dimensions a plan for toy project.	
5.3.W1.1	Squares and glues two boards together-Observation	
5.4.W1.1	Lays out and cuts 3 simple wood joints: butt, rabbet, groove joint-	
Observation		
5.5.W1.1	Produces wooden pieces for a project using saws, planers, jointer, sanders, routers, lathes, shaper, and effective jugs and fixtures to enhance the production—Observation	
5.6.W1.1 5.7.W1.1	Knows the proper method for finishing wood-Observation Assembles a project with fasteners that will be square and meet the blueprint specs to within 1/16 inch-Observation	

Standard 6-Woods I

Standard 6 Understands what the past, present, and future impact technological jobs will have in a global society.

- 6.1. W1.1 Knows the career opportunities in the woods areas-Written
- 6.2. W1.1 Knows how people, supplies, and materials function in industry

Language Arts K-12 Reading Standards, Benchmarks, and Assessments

<u>Kindergarten</u>

<u>Standard 1</u> Be able to listen to and recognize the purpose of the speaker and the purpose of him/herself as the listener.

- 1.5.1 Develop critical listening skills. Disc
- 1.5.2 Demonstrate active listening skills Disc/TOb
- 1.5.3 Perceive and discriminate sounds, words, and their meanings. Prod/TMT
- 1.5.4 Listen without interrupting TOb

Standard 2 Be able to communicate ideas in an organized and focused manner

2.5.1 Participate in a variety of speaking situations. Disc/TOb

- 2.5.2 Use appropriate and respectful language for different audiences and situations. Disc/Rubric/Checklist
- 2.5.3 Offer, accept, and internalize responses. Disc

<u>Standard 3</u> Be able to communicate clearly and effectively through frequent writing.

- 3.5.1 Consider audience and purpose when making choices about form and style. Prod
- 3.5.2 Express self in a variety of genres. Prod
- 3.5.3 Demonstrate the ability to draft, revise, edit and publish in a variety of genres. Prod
- 3.5.4 Organize ideas to achieve cohesion in writing. Conf/Prod
- 3.5.5 Be able to recognize and demonstrate an understanding of the principal parts of speech. Prod
- 3.5.6 Be able to demonstrate proper sentence structure. Prod

<u>Standard 4</u> Be able to select and /or read appropriate material for a variety of purposes.

- 4.5.1 Comprehend material using a variety of strategies. Prod
- 4.5.2 Use word analysis strategies Prod
- 4.5.3 Understand the parts of a book and demonstrate their uses. Disc
- 4.5.4 Demonstrate awareness of literary terms. Prod/Test
- 4.5.5 Participate in a wide variety of reading. Prod
- 4.5.6 Demonstrate reading/study skills Prod/Test
- 4.5.7 Apply reading skills and strategies to informational texts and resource materials Disc/Test/Prod
- 4.5.8 Summarizes and paraphrases information in text Prod/Disc

- 4.5.9 Understand the organization and structure of the library/media center. (2003-04) Prod
- 4.5.10 Use reference materials and printed media resources. Prod

<u>Standard 5</u> Be able to recognize/understand the relevance and universality of literature.

- 5.5.1 Analyze the characters' thoughts and feelings throughout the story Disc./Prod
- 5.5.2 Demonstrate the ability to see things through a character's viewpoint. Disc/Prod
- 5.5.3 Recognize elements of plot Prod/Disc
- 5.5.4 Make inferences and draw conclusions Disc/Prod
- 5.5.5 Identify point of view Disc

<u>Standard 6</u> Be able to recognize, interpret and use information presented through visual arts and electronic media.

- 6.5.1 Use computer and software necessary for research TOb/Prod
- 6.5.2 Summarize information gained from electronic media Disc

<u>First Grade</u>

<u>Standard 1</u>: Uses the skills and strategies of the reading process.

1.1.1 Benchmark One: Understands letter patterns and work structures for meaning

- Use initial, medial and ending sounds for word meaning
- Identify letters, words and sentences
- Create and state a series of rhyming words, including consonant blends
- Add, delete or change target sounds to change words (e.g. change cow to how, pan to an)
- Blend two or four phonemes into recognizable words)e.g., /c/a/t=cat; f/l/a/t/=flat)
- Segment single syllable words with their components (e.g., /c/a/t=cat; /p/l/a/t=splat)
- Generate the sounds from all the letters and letter patterns, including consonant blends and long-and-short-vowel patterns (i.e., phonograms) and blend those sounds into recognizable words
- Read common, irregular sight words (e.g., the, have, said, come, give, of)
- Use knowledge of vowel diographs and r-controlled letter-sounds into recognizable words
- Read compound words and contractions
- Read inflectional form (e.g., -s, -ed, -ing) and root words (e.g., look, looked, looking)
- Read common word families (e.g., -ite, -ate)
- Read aloud with fluency in a manner that sounds like natural speech

1.1.2 Benchmark Two: Develops vocabulary and concept development for meaning

- Classify grade-appropriate categories of words (e.g., concrete collection of animals, foods and toys)
- Use context clues to understand word and sentence meaning

<u>Standard 2</u>: Reads, interprets, and responds to a variety of literacy and informational texts.

2.1.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Identify text structure description, sequence or logical order in comprehending nonfiction text
- Identify title and author of reading selection

2.1.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

- Respond to who, what when, where and how questions in comprehending fiction and non-fiction text
- Use context clues to make simple predictions
- Follow one-step written instructions
- Retell central ideas of fiction and nonfiction text
- Read and understand figurative language of poetry
- Identify and describe the elements of plot, setting, and character(s) in a story, as well as the story's beginning, middle and ending
- Describe the roles of authors and illustrators and their contributors to print materials

Second Grade

<u>Standard 1</u>: Uses the skills and strategies of the reading process

1.2.1 Benchmark One: Understands letter patterns and word structures for meaning.

- Apply knowledge of basic syllabication rules when reading (e.g., vowel consonant-vowel patterns)
- Recognize and use knowledge of spelling patters (e.g., diphthongs, special vowed spellings) when reading
- Recognize common abbreviations (e.g., Jan, Sun, Mr. St)

1.2.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Identify simple meaning-meaning words
- Understand and explain common antonym and synonyms

- Use knowledge of individual words in unknown compound words to predict their meaning
- Know the meaning of simple prefixes and suffixes (e.g., over-, un-, -ing, -ly)

<u>Standard 2</u>: Reads, interprets and responds to a variety of literary and informational texts.

2.2.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Use text structure (e.g., description, cause-effect, compare-contrast, and logical sequence) in comprehension nonfiction text
- Interpret information in information text from diagrams, charts and graphs
- Use title, table of contents, and chapter headings to locate information
- Identify rhythm, rhyme, and alliterations in poetry

2.2.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level appropriate text.

- Understands author's purpose for comprehending informational text
- Restate facts and details in text to clarify and organize ideas
- Compare and contrast plots, settings, and characters presented by different authors
- Draw conclusions based on comparison of different versions of the
- Make inferences based on information in informational text

2.3.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level appropriate text.

- Support conclusions by connecting prior knowledge with information in and inferred in informational text
- Identify and understand major points of informational
- Identify characters behavior based on actions described by author of the text
- Identify underlying theme or author's purpose in fiction and non fiction
- Comprehend basic plots of fairy tales, myths, folktales, legends, and fables from around the world

Grade Three

<u>Standard One:</u> Uses the skills and strategies of the reading process.

1.3.1 Benchmark One: Understands letter patters and word structures for meaning.

- Read text fluently and accurately and with appropriate pacing, intonation, and expression
- Know and use complex word families when reading to decodes unfamiliar words
- Decode regular multisyllabic words
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1.3.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Use sentences and words context to define unknown words
- Use prefixes and suffixes to demonstrate meaning of words
- Use knowledge of prefixes (e.g., un-, re-, pre-, bi-, dis-) and suffixes (e.g., -er, -es, -ful) to determine the meaning of words
- Use sentences and word context to find the meaning of unknown words
- Use a dictionary to learn the meaning and other features of unknown words
- Demonstrate knowledge of levels of specificity among grade-appropriate words and explain the importance of the relations (e.g., dog/mammal/animal/living things)
- Use knowledge of antonyms, synonyms, homophones, and homographs to determine the meanings of words

<u>Standard Two</u>: Reads, interprets, and respond to a variety of literacy and informational texts.

2.3.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Use sentences and words context to define unknown words
- Use prefixes and suffixes to demonstrate meaning of words
- Use knowledge of prefixes (e.g., un-,re, -pre, bi-, dis-) and suffixes (e.g., -er, -es, -ful) to determine the meaning of words

2.3.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level appropriate text.

- Support conclusions by connecting prior knowledge with information in and inferred in informational text
- Identify and understand major points of informational text and modify
- Identify main ideas and supporting details in informational text
- Identify underlying theme or author's purpose in fiction and nonfiction
- Comprehend basic plots of fairy tales, myths, folktales, legends and fables from around the world

<u>Grade Four</u>

<u>Standard One</u>: Uses the skills and strategies of the reading process.

1.4.1 Benchmark one: Understands letter patterns and word structures for meaning.

• Read fiction and nonfiction with grade-appropriate fluency, accuracy, and with appropriate pacing, intonation, and expression

1.4.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Apply knowledge of word origins, synonyms, antonyms, and idioms to determine meaning of words and phrases
- Use knowledge of root words to determine meaning of unknown words within text
- Distinguish and interpret words with multiple meanings
- Know common roots and affixes derived from Greek and Latin and use this knowledge analyze the meaning of complex words (e.g., international)
- Use a thesaurus to determine related words and concepts

<u>Standard Two</u>: Reads, interprets, and responds to a variety of literary and informational texts.

2.4.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Distinguish between cause and effect and fact and opinion in informational text
- Understand structural differences of different forms of literature including fantasies, fables, myths, legends and fairy tales
- Define figurative language (e.g., metaphor, simile, hyperbole, personification, and understand its use in literary works
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- 2.4.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level Appropriate texts.
 - Identifies and uses text structure of information text (e.g., compare/contrast, sequential order, description, and cause/effect) to comprehend text
 - Use predictions (prior knowledge) to determine meaning of text
 - Make and confirm predictions about text suing prior knowledge, context clues, illustrations, titles, topic sentences, important words, and foreshadowing clues
 - Evaluate new information and hypotheses by testing them against known information ideas
 - Draw conclusions based on comparing information from several different sources
 - Determine the causes of characters' actions based on character traits and understanding of the situation and setting or narrative as described by the author
 - Identify main events of the plot, their causes, and the effects of events of future action

Fifth Grade

<u>Standard 1</u>: Uses the skills and strategies of the reading process.

1.5.1 Benchmark One: Understands letter patterns and word structures for meaning.

• Read narrative and informational text fluently and accurately with appropriate pacing, intonation, and expression

- 1.5.2 Benchmark Two: Develops vocabulary and concept development for meaning.
 - Use word origins to determine meaning of unknown words
 - Understand and use frequently used synonyms, antonyms, and homophones for comprehending ext.
 - Know and use common roots and affixes of Greek and Latin origin to determine meaning of complex words

<u>Standard Two</u>: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

2.5.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Use text features (e.g. format, graphics, sequence, diagrams, illustrations, charts, and maps) to understand informational text
- Identify and analyze characteristics of poetry, drama, fiction, and nonfiction, and how the author uses those characteristics to define meaning

2.5.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

- Use figurative and metaphorical language in context to determine meaning
- Identify main ideas and concepts in text and identify and use evidence to support those ideas
- Draw inferences, conclusions, and generalizations about text and support them with evidence and prior knowledge
- Understand how them is similar to moral of a selection
- Use and understand the function and effect of literary devices (e.g., imagery, metaphor, and symbolism)
- Understand author's use of techniques (figurative language, appeal of characters, credibility of plots and settings) to influence reader's interpretation and perspective
- Determine facts, supporting inferences, and opinion in text

Sixth Grade

<u>Standard One</u>: Use the skills and strategies of the reading process.

- 1.6.1 Benchmark One: Understands letter patters and word structures for meaning.
 - Read aloud narrative and expository text fluently and accurately and with appropriate pacing, intonation, and expression

1.6.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Recognize the origins and meanings of frequently used foreign words in English and use these words accurately in speaking and writing.
- Monitor expository text for unknown words or words with novel meanings by using word, sentence, and paragraph clues to determine meaning

- Understand and explain "shades of meaning" in related words (e.g., softly and quietly)
- Identify and interpret figurative language and words with multiple meanings

<u>Standard Two</u>: Reads, interprets, and responds to a variety of literary and informational texts.

2.6.1 Benchmark One: Understands structure of informational and literary text for meaning.

- Identify the structural features of popular media (e.g., newspapers, magazines, online information) and use the features to obtain information)
- Analyze text that uses the compare-and-contrast organizational pattern
- Determine the adequacy and appropriateness of the evidence for an author's conclusions
- Make reasonable assertions about a text through accurate, supporting citations
- Explain the effects of common literary devices (e.g., symbolism, imagery, metaphor) in a variety of fictional and nonfiction texts

2.6.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

- Connect and clarify main ideas by identifying their relationships to other sources and related topics
- Clarify an understanding of texts by creating outlines, logical notes, summaries, or reports
- Follow multiple-step instructions for preparing applications (e.g., for a public library card, bank saving account, sports club, league membership)
- Critique the credibility of characterization and the degrees to which a plot is contrived or realistic (e.g., compare use of fact and fantasy in historical fiction)
- Analyze the effect of the qualities of the character (e.g., courage or cowardice, ambition or laziness, on the plot and the resolution of the conflict)
- Analyze the influence of setting on the problem and its resolution
- Define how tone or meaning is conveyed in poetry through word choice, figurative language, sentence structure, line length, punctuation, rhythm, repetition, and rhyme
- Identify the speaker and recognize the difference between first and third person narration (e.g., autobiography compared with biography)
- Identify and analyze features of themes conveyed through characters, actions, and images

Content Standards

<u>Standard 1</u>: Uses the skills and strategies of the reading process.

1.7.1 Benchmark One: Understands letter patterns and word structures for meaning.

- Uses knowledge of Greek, Latin, and Anglo-Saxon roots an affixes to understand content-area vocabulary
- 1.7.2 Benchmark Two: Develops vocabulary and concept development for meaning.
 - Identify idioms, analogies, metaphors, and similes in prose and poetry
 - Clarify word meanings through the use of definition, example, restatement, or contrast

<u>Standard Two</u>: Reads, interprets, and responds to a variety of literary and informational texts.

2.7.1 Benchmark One: Understands structure of information and literary texts for meaning.

- Understand and analyze the difference in structure and purpose between various categories of informational materials (e.g., textbooks, newspapers, instructional manuals, signs)
- Locate information by using a variety of consumer, workplace, and public documents
- Analyze text that uses the cause-and-effect organizational pattern
- Articulate the expressed proposed and characteristics of different forms of prose (e.g., short story, novel, novella, essay)

2.7.2 Benchmark Two: Reads, Comprehends, responds, and analyzes grade-level-appropriate text.

- Identify and trace the development of an author's argument, point of view, or perspective in text
- Understand and explain the use of simple mechanical device by following technical directions
- Assess the adequacy, accuracy, and appropriateness of the author's evidence to support claims and ascertains, noting instances of bias and stereotyping
- Identify events that advance the plot and determine how each event explains past or present action(s) or foreshadows future action(s)
- Analyze characterization as delineated through a character's thoughts, words, speech patterns, and actions; the narrator's description, and the thoughts, words, and actions of other characters
- Identify and analyze recurring themes across works (e.g., the value of bravery, loyalty, and friendship, the effects of loneliness)
- Contrast points of view (e.g., first and third person, limited and omniscient, subjective and objective) in narrative text and explain how they affect the overall theme of the work

• Analyze a range of responses to a literary work and determine the extent to which the literary elements in the work shaped those responses

Grade 8

Content Standards

<u>Standard 1</u>: Uses the skills and strategies of the reading process.

1.8.1 Benchmark One: Understands letter patterns and word structure for meaning.

• Understands the most important points in history of English language and use common word origins to determine the historical influences on English word meanings

1.8.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Analyze idioms, analogies, metaphors, and similes to infer the literal and figurative meanings of phrases
- Use word meanings within the appropriate context and show ability to verify those meanings by definition, restatement, example, comparison, or contrast

<u>Standard 2</u>: Reads, interprets, and responds to a variety of literary and informational texts for meanings.

2.8.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Compare and contrast the features and elements of materials to gain meaning from documents (e.g., warranties, contracts, product information, instruction manuals)
- Analyze text that uses propositions and support patterns
- Find similarities and differences between sections in the treatment of scope, or organization of ideas
- Analyze original text to determine main idea, including critical details and underlying meaning
- Use information from a variety of consumer, workplace, and public documents to explain documents
- Determine and articulate the relationship between the purposes and characteristics of different forms of poetry (e.g., ballad, lyric, couplet, epic, ode, elegy, and sonnet)

2.8.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

- Evaluate the unity, coherence, logic, internal consistency, and structural patterns of text
- Evaluate the structural elements of plot (e.g., subplots, parallel episodes, climax), the plot's development, and the way in which conflicts are (or are not) addressed and resolved

- Compare and contrast motivations and reactions of literary characters from different historical eras confronting similar situations or conflicts
- Analyze the relevance of the setting (e.g., place, time, customs) to the mood, tone, and meaning of the text
- Identify and analyze recurring themes (e.g., good verses evil) across traditional and contemporary works
- Identify significant literary devices (e.g., metaphor, symbolism, dialect, irony) that defines a writer's style and use those elements to interpret the work
- Analyze a work of literature, showing how it reflects the heritage, traditions, attitudes, and beliefs of its author (Biological approach)

Grades 9-12

Content Standards

<u>Standard 1</u>: Uses the skills and strategies of the reading process.

1.9-12.1 Benchmark One: Understands letter patterns and word structures for meaning.

• Apply knowledge of Greek, Latin, and Anglo-Saxon roots and affixes to draw inferences for meaning.

1.9-12.2 Benchmark Two: Develops vocabulary and concept development for meaning.

- Identify and use the literal and figurative meanings of words and understand word derivations
- Distinguish between the denotative and connotative meanings of words and interpret the connotative power or of words
- Identify Greek, Latin, and use the knowledge to understand the origin and meaning of words

<u>Standard 2</u>: Reads, interprets, and responds to a variety of literary and informational texts.

2.9-12.1 Benchmark One: Understands structure of informational and literary texts for meaning.

- Analyzes both the features and the rhetorical devices of different types of documents and the way in which authors use those features and devices
- Prepare a bibliography of reference materials for a report using a variety of consumer, workplace, and public documents
- Make warranted and reasonable assertions about the author's arguments by suing elements of the text to defend and clarify interpretations

2.9-12.2 Benchmark Two: Reads, comprehends, responds, and analyzes grade-level-appropriate text.

- Analyze an author's implicit and explicit assumptions and beliefs about a subject
- Evaluate the credibility of an author's argument or defense of a claim by critiquing the relationship between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text (e.g., in professional journals, editorials, political, speeches, primary source material)
- Articulate the relationship between the expressed purposes and the characteristics of different forms of literature (e.g., comedy, tragedy, drama, dramatic monologue)
- Analyze the way in which the theme or meaning of a selection represents a view or comment on life, using textual evident to support the claim
- Analyze interactions between main and subordinate characters in a literary text (e.g., comedy, tragedy, drama, dramatic, monologue)
- Analyze the way in which the theme or meaning of a selection represents a view or comment on life, using textural evidence to support the claim
- Analyze interactions between main and subordinate characters in a literary text (e.g., internal and external conflicts, motivations, relationships, influences) and explain the way those interactions affect plot
- Analyze ways in which poets use imagery, personification, figures of speech, and sounds to evoke readers' emotions
- Determine characters' traits by what the characters say about themselves in narration, dialogue, dramatic monologue, and soliloquy
- Compare works that express a universal them and provide evidence to support the ideas expressed in each work
- Analyze literary works and authors' identified major themes and issues of their eras
- Analyze and trace an author's development of time and sequence, including the use of complex literary devices (e.g., foreshadowing, flashbacks)
- Recognize and understand the significance of various literary devices, including figurative language, imagery, allegory, and symbolism, and explain their appeal
- Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and incongruities in a text
- Explain how voice, persona and the choice of a narrator affect characterization and the tone, plot, and credibility of a text

Math Standards and Benchmarks

<u>Grade K</u>

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will demonstrate understanding of number sense.

- Recognize, and identify numerals
- Demonstrate understanding of number concepts
- Explore writing numerals

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will explore and identify patterns.

- Sort objects by same and different attributes and explain the sorting process
- Sequence according to a single attribute
- Create a simple ABAB pattern and identify it

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will develop a basic understanding of spatial relationships.

• Demonstrate a basic understanding of spatial relationships

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will represent and interpret data through graphs using real objects or pictures.

• As a member of a small group, contribute to the construction of a graph using real objects or pictures, and the interpreting of results

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will explore strategies to solve problems.

- Guess, check and revise
- Act out of use objects
- Use or look for a pattern
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram

<u>Standard 6:</u> The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions

<u>Standard 7</u>: The student will use various means of communication and representation to explain mathematical concepts and thinking.

<u>Standard 8:</u> The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

Grade 1

Standard 1: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will demonstrate understanding of numbers sense and the base ten place value system.

- Count by 1s, 2s, 5s, & 10s, to 100
- Identify position and use the vocabulary involving ordinal numbers to 10
- Match the number of objects in a set to numerals an number words to 20
- Read and write whole numbers to 100
- Demonstrate understanding of place value of digits in numbers to 99

Benchmark: The student will understand concepts of addition and subtraction as whole number operations.

• Demonstrate understanding of concepts of addition and subtraction of whole numbers to 12, using objects and numbers in vertical and horizontal format

Benchmark: The student will understand concepts of fractions.

• Demonstrate understanding of the concepts of fractions by identifying ¹/₂, 1/3, ¹/₄ of a whole

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will sort and classify objects according to specific attributes.

• Sort objects or representations by three or more attributes and justify his/her strategies

Benchmark: use terms of comparison for numbers and groups of objects.

• Use the terms and symbols for equal to, greater than, less than to compare both groups of objects and numbers, with numbers up to 20

Benchmark: Identify terms and extend patterns.

• Identify and extend three-characteristic pattern

Westwood Community Schools Standards and Benchmarks <u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will demonstrate of geometry and spatial sense with twodimensional figures.

• Describe and draw or create a model of two-dimensional figures: circle, triangle, square and rectangle

Benchmark: The student will estimate and measure using non-standard and standard units.

- Identify a penny, nickel, and dime and their values
- Measure length to the nearest unity using non-standard, and customary measurement tools (manipulative)
- Tell time to hour and half hour intervals using digital and analog clocks
- Demonstrate knowledge of a calendar

<u>Student 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will use a simple graph to predict and to represent data.

• Make predictions and use direct representations to summarize data in the format of a simple graph

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use indicated strategies to solve problems in daily life and other curriculum areas.

- The student will use indicated strategies to solve problems in daily life and other curricular areas
 - Guess, check and revise
 - Act out or use objects
 - Use or look for a pattern
 - Use logical reasoning
 - \circ Brainstorm
 - Draw a picture or diagram
 - Make an organized list

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

Benchmark: The student will use reasoning skills in making mathematical guesses (conjecture) and in checking mathematical ideas (justification).

<u>Standard 7</u>: The student will use various means of communication and representation to explain mathematical concepts and thinking.

Benchmark: The student will communicate effectively when demonstrating the ability to question and explain.

<u>Standard 8</u>: The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

Benchmark: The student will demonstrate the ability to connect intuitive, experiential learning with formal math learning.

Grade 2

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will demonstrate understanding of the use of estimation to determine answers to problems dealing with numbers.

• Use estimation to determine reasonable answers to problems dealing with numbers

Benchmark: The student will demonstrate understanding of number sense and the base ten place value system.

- Read whole numbers to 999
- Demonstrate an understanding of place value with numbers to 999

Benchmark: Demonstrate understanding of concepts of whole number operations.

- Apply basic fact strategies to obtain sums to 18
- Apply basic fact strategies to obtain differences from 18

Benchmark: Demonstrate computation skills involving whole numbers using an appropriate method.

- Know the basic addition facts to 18
- Know the basic subtraction facts from 18
- Add up to two-digit numbers with and without regrouping

Benchmark: Understand concepts of fractions.

• Demonstrate understanding of fourths, thirds, and halves as part of a whole or group

<u>Standard 2:</u> The student will demonstrate understanding of algebra.

Benchmark: The student will discover, describe, extend, and create number patterns.

• Demonstrate the understanding needed to discover, describe, extend, and create number patterns

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will demonstrate understanding of geometry and spatial sense with three-dimensional solids.

• Demonstrate understanding of geometry and spatial sense with three-dimensional solids

Benchmark: Estimate and measure using non-standard and standard units

- Identify and know the value of a penny, nickel, dime, quarter, and half dollar
- Determine the total value of combinations of different coins to \$1.00
- Tell time to five minute intervals with a digital and an analog clock
- Apply calendar concepts in daily situations

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will construct and interpret bar graphs and pictographs.

• Make predictions, collect and record data, construct and interpret bar graphs and pictographs, and compare the predicted and actual outcomes

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use indicated strategies in the four-step method to solve problems.

- Applies the four-step method to solve problem: understand, plan, solve and look back
- The student will use indicated strategies in the four-step method to solve problems
 - Guess, check and revise
 - Act out or use objects
 - Use or look for a pattern
 - Use logical reasoning
 - o Brainstorm

Grade 3

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmarks: The student will demonstrate understanding of the use of estimation when working with varying amounts and objects.

- Make reasonable visual estimations with varying amounts and objects
- Use rounding and front-end estimating with numbers of up to three-digits

Benchmarks: Demonstrate understanding of number sense and the base ten place value system.

- Read and write whole numbers to 9,999
- Explain place and value of digits in numbers to 9,999
- Compare and order numbers through 9,999

Benchmarks: Demonstrate understanding of concepts of whole number operations.

• Use strategies to demonstrate understanding of multiplication concepts

Benchmarks: Demonstrate computation skills involving whole numbers using an appropriate method.

- Add and subtract up to three-digit numbers with and without regrouping
- Know basic multiplication facts
- Demonstrate mental computation skills with addition and subtraction of whole numbers
- Count coins and currency up to \$10

Benchmarks: Understand concepts of fractions.

• Demonstrate understanding of sixths, eights, and tenths as part of a whole or group

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will identify, describe, extend, and create numeric and geometric patterns.

• Demonstrate the understanding needed to identify, describe, extend, and create numeric and geometric patterns. With numbers up to 20.

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will demonstrate understanding of geometry and spatial sense in natural and constructed environments.

- Demonstrate knowledge of the concept of perimeter by computing the perimeter of objects
- Identify geometric shapes in natural and constructed environments

Benchmark: The student will estimate and measure using non-standard and standard units.

• Recognize the four ways of representing coins in writing

- Measure to the nearest unit using customary and metric measurements
 - Distance: inch, foot, yard, centimeter, meter
 - Volume: cup, pint, quart, gallon, liter
 - Mass: pound, kilogram
 - Time: minute, hour, day
 - Temperature: degrees Fahrenheit, degrees Celsius

Benchmark: The student will tell time to minute intervals with a digital or analog clock in daily situations including both a.m. and p.m.

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will create and construct graphs and tables.

• Create and construct graphs and tables which accurately represent specified information several times over a period of time, meeting the following requirements: title on graph, accurate data, correct labeling, legibility

Benchmark: Understand basic concepts of probability.

• Use concepts of probability (e.g., likely, unlikely, more likely, equally likely, certain, possible, impossible).

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use indicated strategies in the four step method to solve problems.

- Guess, check and revise
- Act out or use objects
- Use or look for a pattern
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram
- Make an organized list
- Use or construct a table
- Write a number sentence (addition, subtraction, multiplication), work backward, make it simpler

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

Benchmark: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

<u>Standard 7:</u> The student will use various means of communication and representation to explain mathematical concepts and thinking.

Westwood Community Schools Standards and Benchmarks Benchmark: The student will sue reading, writing, speaking, and listening skills to communicate mathematical ideas.

Grade 3

Content Standards

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will demonstrate understanding of the use of estimation when working with varying amounts and objects.

- Make reasonable visual estimations with varying amounts and objects
- Use rounding and front-end estimating with numbers of up to three digits

Benchmark: Demonstrate understand of number sense and the base ten place value system.

- Read and write whole numbers to 9,999
- Explain place and value of digits in numbers to 9,999
- Compare and order numbers through 9,999

Benchmark: Demonstrate computation skills involving whole numbers using an appropriate method.

- add and subtract up to three-digit numbers with and without regrouping
- know basic multiplication skills with addition and subtraction of whole numbers
- count coins and currency up to \$10

Benchmark: Understand concepts of fractions.

• Demonstrate understanding of sixths, eighths, and tenths as part of a whole or group

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will identify, describe, extend, and create numeric and geometric patterns.

• Demonstrate the understanding needed to identify, describe, extend, and create numeric and geometric patterns with numbers up to 20

<u>Standard 3:</u> The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will demonstrate understanding of geometry and spatial sense in natural and constructed environments.

• Demonstrate knowledge of the concept of perimeter by computing the perimeter of objects

- Identify geometric shapes in natural and constructed environments
- Estimate and measure using non-standard and standard units
- Recognize the four ways of representing coins in writing
- Measure to the nearest unit using customary and metric measurements
 - Distance: inch, foot, yard, centimeter, meter
 - Volume: up, pint, quart, gallon, liter
 - Mass: pound, kilogram
 - Time: minute, hour, day
 - Temperature: degrees, Fahrenheit, degrees Celsius
- Tell time to minute intervals with a digital or analog clock in daily situations including both a.m. and p.m.

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The students will create graphs and tables.

- Create and construct graphs and tables which accurately represent specified information several times over a period of time, meeting the following requirements: title on graph, correct form, legibility, accurate data, correct labeling
- Understands basic concepts of probability

Grade 3

Process Standards

<u>Standard 5:</u> The student will use strategies to solve problems.

Benchmark: The students will use indicated strategies in the four-step method to solve problems.

- Guess, check and revise
- Act out or use objects
- Use or look for a pattern
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram
- Make an organized list
- Use or construct a table
- Write a number sentence (addition, subtraction, multiplication), work backward, make it simpler

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

Benchmark: The student will use reasoning skills in formulating predictions, checking conclusions, and explaining the ideas.

<u>Standard 7</u>: The student will use various means of communication and representation to explain mathematical concepts and thinking

Benchmark: The student will use reading, writing, speaking and listening skills to communicate mathematical ideas.

<u>Standard 8</u>: The student will recognize that mathematics is an integrated, connected, meaningful body knowledge.

Benchmark: The student will make connections between math and daily life, among math ideas, and between math and other subjects.

Grade 4

Content Standards

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will estimate results of computation and verify the reasonableness of the estimate with a calculated answer.

• Estimate sums, differences, products, and quotients and verify the reasonable of results with calculated answer weather using paper and pencil or calculator.

Benchmark: demonstrates an understanding of numbers, way of representing numbers, relationships among numbers and number systems.

- Write numbers in standard, expanded, and work form from hundred-thousandths place to tenths place
- Compare and order numbers from hundred-thousandths place to tenths place
- Identify the place value of a specific numeral in a whole number

Benchmark: demonstrate computation skills involving whole numbers using an appropriate method.

- Select an appropriate computational technique (mental math or paper/pencil) within parameters indicated by other Standard 1 performance criteria
- Demonstrate mental computational skills with addition, subtraction, multiplication, and division of whole numbers
- Add and subtract whole numbers through thousands place
- Know basic division facts
- Multiply numbers through hundredths place by a 2-digit factor

• Divide numbers through thousands place by 1-digit divisor

Benchmark: Understanding of the concepts of fractions and decimals.

- Identify and write fractions that represent part of a whole or group
- Use manipulatives to compare like/unlike fractions and identify equivalent fractions
- Add and subtract fractions with like denominations
- Add and subtract money in decimal form to \$99.99

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will identify, describe, extend, and create numeric, geometric and symbolic patterns.

- Demonstrate the understanding needed to identify, describe, extend and create numeric, geometric, and symbolic patterns
- Solve equations

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will describe geometric properties and relationships

- Recognize the properties of circles, triangles, squares, and rectangles
- Identify prisms and pyramids
- Demonstrate spatial sense involving symmetry, congruence, and coordinates
- Use geometric vocabulary in comparing two- and three dimensional geometric shapes

Benchmark: Student will estimate and measure using non-standard and standard units.

- Count coins and currency up to \$20.00 and make change to \$5.00
- Identify and use the appropriate unit and/or tool for the customary and metric systems given two choices for measuring in each of the following: length, volume, mass, time and temperature
 - Length: inches, feet, yards, miles, centimeters, meters, kilometers
 - Volume: cups, pints, quarts, gallons, milliliters, liters
 - Weight/mass: ounces, pounds, tons; grams, kilograms
 - Time: minutes, hours, days
 - Temperature: degrees Fahrenheit, degrees Celsius
- Demonstrate the ability to find perimeter and areas
- Find perimeter and area using manipulative or representations

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will collect, organize, and analyze data involving tables, graphs, and diagrams.

- Identify and write fractions that represent part of a whole or group
- Use manipulative to compare like/unlike fractions and identify equivalent fractions
- Add and subtract fractions with like denominations
- Add and subtract money in decimal form to \$99.99

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will identify, describe, extend and create numeric, geometric and symbolic patterns.

- Demonstrate the understanding needed to identify, describe, extend and create numeric, geometric and symbolic patterns
- Solve equations

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will describe geometric properties and relationships.

- Recognize the properties of circles, triangles, squares and rectangles
- Identify prism and pyramids
- Demonstrate spatial sense involving symmetry, congruence and coordinates
- Use geometric vocabulary in comparing two and three dimensional geometric shapes

Benchmark: Estimate and measure using non-standard and standard units

- Count coins and currency up to \$20.00 and make change to \$5.00
- Identify and use the appropriate unit and/or tool or the customary and metric systems given two choices for measuring in each of the following: length, volume, mass, time, and temperature.
 - o Length: inches, feet, yards, miles, centimeters, meters, kilometers
 - Volume: cups, pints, quarts, gallons, millileters, liters
 - Weight/mass: ounces, pounds, tons; grams, kilogram
 - Time: minutes, hours, days
 - Temperature: degrees Fahrenheit, degrees Celsius

Benchmark: Demonstrate the ability to find perimeter and area.

• Find perimeter and area using manipulative or representations.

<u>Student 4:</u> The student will demonstrate understanding of data analysis and probability.

<u>Benchmark:</u> The student will collect, organize, and analyze date involving tables, graphs and diagrams.

- Analyze data items from a self-created display of survey data
- Display data using either a table, bar graph, pictograph, line graph, or circle graph

Benchmark: Demonstrates an understanding of basic concepts of probability.

• Perform and discuss results of simple probability experiments

Grade 4

Process Standards

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use strategies in the four-step method to solve problems.

Benchmark: The student will use problem solving strategies in the four-step method to solve problems.

- Guess, check and revise
- Act out or use objects
- Use or look for a pattern
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram
- Make an organized list
- Use or construct a table
- Write a number sentence (addition, subtraction, multiplication, division)
- Work backward
- Make it simpler

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking process when arriving at logical conclusions.

Benchmark: The student will use mathematical knowledge to make hypotheses and justify conclusions.

<u>Standard 7:</u> The student will use various means of communication and representation to explain mathematical concepts and thinking.

Benchmark: The student will effectively use receptive and expressive language in the context of mathematics.

<u>Standard 8</u>: The student will recognize the mathematics is an integrated connected meaningful body of knowledge.

Benchmark: The student recognizes the usability of mathematical knowledge in his/her life.

Content Standards

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will compute with whole numbers, fractions, and decimals.

- Multiply whole numbers through thousands place by a one or two digit factor
- Divide whole numbers through thousands place by a one-digit divisor or a twodigit divisor ending in zero, expressing any remainder as a whole numbers
- Add decimals through hundredths place
- Subtract decimals through hundredths place
- Add fractions with like denominations and simplify to lowest terms
- Estimate sums and differences by rounding
- Compute using mental math

Benchmark: Understand the base ten place value system.

- Write numbers from 100 millions place through hundredths place
- Compare and order numbers from 100 millions place through hundredths place

<u>Standard 2:</u> The student will demonstrate understanding of algebra.

Benchmark: The student will discover, generalize, and extend patterns.

- Extend a pattern composed of concrete objects or symbols
- Identify relationships between two quantities as shown in a table
- Interpret the data as shown in a chart/table of graph

Benchmark: Organize and display sets of data.

• Create a bar graph, line graph, or pictograph to display data

Benchmark: Determine outcomes and probabilities involving basic events.

• List possible outcomes

Benchmark: Use variables in addition and subtraction expressions and equations.

- Write a simple expression or equation using a variable
- Use strategies to solve for a variable in addition or subtraction equations (e.g., guess and check, fact families, inverse operations)

<u>Standard 3:</u> The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will understand the characteristics of lines and angels.

• Identify points, line segments, rays, lines, parallel lines, perpendicular lines, and intersecting lines

• Classify angels as acute, right or obtuse

Benchmark: Understand characteristics of polygons and three dimensional figures.

- Identify a polygon as a quadrilateral, pentagon, hexagon or octagon
- Identify and name a cylinder, cone, sphere, cube, prism, and pyramid

Benchmark: Understand perimeter and area.

- Find the perimeter of a given triangle or quadrilateral
- Find the area of a square or rectangle

Benchmark: Understand measurements within the same system.

- Recognize equivalent measurements
 - o Length: inches, feet, yards, centimeters, meters, kilometers
 - Volume: cups, pints, quarts, gallons, milliliters, liters
 - o Weight/mass: ounces, pounds, tons, grams, kilograms
 - o Time: seconds, minutes, hours, days, weeks, months, years
- Select appropriate customary units to measure length, volume, and weight
- Select appropriate metric units to measure
 - Length: centimeters, meters, kilometers
 - Volume: milliliters, liters, kiloliters
 - Mass: milligrams, grams, kilograms

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will obtain information by reading charts/tables and graphs.

• Identify a graph as a line graph, bar graph, pictograph, or circle graph

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use problem solving strategies in the four-step method to solve problems.

- Guess, check, and revise
- Estimate
- Act out or use manipulative
- Use or look for patterns
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram
- Make an organized list
- Use or construct tables, graphs, and charts
- Write a number sentence
- Write algebraic expressions
- Work backwards

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

<u>Standard 7:</u> The student will use various means of communication and representation to explain mathematical concepts and thinking.

<u>Standard 8</u>: The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

Grade 6

Process Standards

<u>Standard 5</u>: The student will use strategies to solve problems.

Benchmark: The student will use problem solving strategies in the four-step method to solve problems.

- Guess, check and revise
- Estimate, compatible numbers, clustering, front-end estimating
- Act our or use manipulative
- Use or look for patterns
- Use logical reasoning
- Brainstorm
- Draw a picture or diagram
- Make an organized list
- Use or construct tables, graphs and charts
- Write a number sentence
- Write and solve algebraic expressions
- Work backwards
- Interpreting word phases in math problems

<u>Standard 6</u>: The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

<u>Standard 7:</u> The student will use various means of communication and representation to explain mathematical concepts and thinking.

<u>Standard 8</u>: The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

Content Standards

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will know the properties of, and compute with, rational numbers expressed in a variety of forms.

- Convert fractions to decimals and percents and use these representations in estimations, computations, and applications
- Read, write, and compare rational numbers
- Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions

Benchmark: The student will use number theory concepts.

- Use the inverse relationships between raising to a power and extracting the root of a perfect square integer; for an integer that is not square, determine without a calculator the two integers between which its square root lies and explain why
- Understand the meaning of the absolute value of a number; interpret the absolute value as the distance for the number from zero on a number line; and determine the absolute value of real numbers.

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will understand basic algebraic terms and symbols (e.g. equation, inequality, variable, exponent).

- Use the correct order of operations to evaluate algebraic expressions
- Use variables and appropriate operations to write an expression, an equation
- Solve one step equations of one variable

<u>Standard 3</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will understand statistical concepts.

- Understand appropriate measures (mean, median, mode, range)
- Use appropriate statistical representations

Benchmark: The student will compute the perimeter, area, and volume of common geometric objects.

• Determine probability of a single event using math/theoretical models

Benchmark: The student will understand the characteristics of (classification) and relationships among (parallel, perpendicular, congruence) lines, angles, complex polygons, and circles.

<u>Standard 4</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will understand statistical concepts.

- Understand appropriate measures (mean, median, mode, range)
- Use appropriate statistical representations

Benchmark: The student will understand probability and concepts.

- Determine probability of a single event using math/theoretical models
- Use a variety of simple models (tree diagrams, sample spaces, grids, and tables) to represent the possible outcomes for probability situations

Grade 7

Process Standards

<u>Standard 5</u>: The student will use strategic to solve problems.

<u>Standard 6:</u> The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.

<u>Standard 7</u>: The student will use various means of communication and representation to explain mathematical concepts and thinking.

<u>Standard 8</u>: The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

<u>Grade 8</u>

Content Standards

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will understand the relationships among number representations (e.g., whole numbers, positive, and negative integers, fractions, ratios, decimals, percents, scientific notation, exponential).

- Understand and use ratio and proportions
- Use factoring, multiples, prime factoring and relative prime so solve problems

- Demonstrate an understanding of scientific notation
- Apply estimation strategies
- Compute with rational numbers
 - Perform operations on rational numbers (e.g., ass, subtract, multiply, divide, raised to a power, take opposites and reciprocals)

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will represent and generalize patterns.

- Identify linear functions through informal investigations
- Graph linear equations

Benchmark: The student will simplify, write and evaluate mathematical expressions.

• Solve equations and inequalities using multiplication and addition rules

<u>Standard 3</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will describe geometric properties, patterns, and relationships.

- Applies concepts of surface area, volume, perimeter and area
- Classify polygons and three dimensional figures based on properities

Benchmark: The student will develop and use formulas and procedures to solve problems involving measurement.

• Read and interpret various scales including those based on number lines, graphs, metric scale and customary scale

<u>Standard 4</u>: The students will demonstrate understanding of data analysis and probability.

Benchmark: The student will apply appropriate formats for organizing, displaying data, and interpreting data.

• Construct and interpret line, bar, and circle graphs, histograms, box plots, and stat plots

Benchmark: The student will understand measures of central tendency interpreting data

• Demonstrate an understanding of faulty arguments, common errors, and misleading presentations of data

Benchmark: The student will demonstrate and understand of probability concepts and county rules.

- Solve real-world problems with informal use of combinations and permutations (for example, determining the number of possible meals at a restaurant featuring a given number of side dishes)
- Recognize the difference between theoretical and experimental probability

- 1) The student will demonstrate understanding of numbers and operations. The student will:
 - Perform mathematical operations on a variety of number families and matrices
 - Understand and use ratio and proportions
 - Understand the meaning and effects of mathematical operations
 - Use factoring, multiples, prime factoring, and relative prime to solve problems
 - Develop an understanding of scientific notation
- 2) The student will demonstrate understanding of algebra. The student will:
 - Simplify, write and evaluate mathematical expressions
 - Solve equations and inequalities using multiplication and addition rules
 - Graph linear and quadratic equations
- 3) The student will demonstrate understanding of geometry and measurement. The student will:
 - Calculate area, perimeter, and circumference of polygons and circles
 - Classify polygons and three dimensional figures based on properties
 - Develop an understanding of similar polygons
 - Calculate volume and surface area of three dimensional figures
- 4) The student will demonstrate understanding of data analysis and probability. The student will:
 - Construct and interpret line, bar and circle graphs
 - Understand measures of central tendency
 - Understand probability concepts
 - Create and use appropriate graphical representations of data including histograms, box plots and stat plots
- 5) The student will use strategies to solve problems.
- 6) The student will use mathematical reasoning and proof to justify thinking processes when arriving at logical conclusions.
- 7) The student will use various means of communication and representation to explain mathematical concepts and thinking.
- 8) The student will recognize that mathematics is an integrated, connected, meaningful body of knowledge.

Numbers and Operations

<u>Standard 1</u>: The student will demonstrate understanding of numbers and operations.

Benchmarks: The student will demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers, and numbers systems.

- Classify numbers as members of the following sets (i.e., natural, whole, integers, rational and irrational)
- Represent numbers in a variety of equivalent forms (i.e., fractions, decimal, percents, exponential, scientific notation)
- Compare and order rational and irrational numbers
- Apply properties of addition and multiplication with rational numbers (i.e., identity, commutative, associative, distributive)
- Apply number theory concepts with whole numbers, (e.g., composite prime, factor, multiple, divisibility)

Benchmark: The student will compute fluently.

- Perform computations involving the four basic operations (+, -, x-) with rational numbers
- Perform computations involving percents
- Perform computations involving proportions

Benchmark: The student will apply estimation strategies to determine reasonableness of numerical computations (e.g., rounding compatible numbers, truncations, clustering).

Benchmark: The student will apply appropriate computational techniques in a problemsolving solution.

<u>Grade 11</u>

<u>Algebra</u>

<u>Standard 2</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will demonstrate an understanding of equivalent forms of expression.

- Simplify numerical expressions involving rational numbers using correct order of operations (including whole number exponents and radicals with radicands that are perfect squares or perfect cubes)
- Simplify variable expressions
- Evaluate variable expressions

Benchmark: The student will apply algebraic thinking to represent mathematical relationships.

- Translate written situations to numerical expressions, variable expressions or equations
- Generalize basic patterns (e.g., tables, arithmetic sequences, geometric sequences) using algebraic notation
- Solve open sentences (one variable over the set of rational numbers)

Benchmark: The student will analyze linear equation by using a table.

- Determine the slope
- Determine x and/or y intercepts

Benchmark: The student will apply concepts of algebra in a problem-solving situation.

<u>Grade 11</u>

Geometry and Measurement

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will solve proportions to determine measurements (e.g., corresponding parts of similar figures, scale drawing).

Benchmark: The student will apply appropriate formulas to determine measurements (formulas provided).

- Compute the perimeter of plane figures
- Compute the perimeter of a circle
- Compute the area of plan geometric figures (e.g., triangle, rectangle, circle, parallelogram, trapezoid, irregular-shaped polygons)
- Compute the surface area of solid geometric figures (e.g., cone, cylinder, prism, pyramid, sphere)
- Compute the volume of solid geometric figures (e.g., cone, cylinder, prism, pyramid, sphere)
- Apply the Pythagorean theorem (e.g., determine distance, find missing length of sides of right triangles)

Benchmark: The student will convert measures within and between measurement systems.

- Convert basic measurements from one customary unit to another (e.g., inches to feet, ounces to pounds)
- Convert basic measurements from one metric unit to another (e.g., meters to centimeters, grams to kilograms)
- Convert basic measurements from customary to metric or vice-versa (e.g., gallons to liters, meters to yards) (conservation factors provided)

Benchmark: The student will apply concepts of geometry and measurement in a problemsolving situation.

Data Analysis and Probability

<u>Standard</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will describe or display data using statistical measures or techniques.

- Compute appropriate measures of central tendency (i.e., mean, median, model) and range
- Display and organize data using appropriate techniques (e.g., line graph, bar graph, circle graph, histogram, box-and-whisker plot, stem and leaf plot)

Benchmark: The student will infer or predict based on data or information (e.g., charts, tables, plots, graphs)

Benchmark: The student will apply basic understanding of change and probability.

- Apply strategies (e.g., tree diagram, organized list, chart, fundamental counting principle) to determine the total number of possible outcomes for an event
- Compute the probability that a specific event will happen
- Compute the odds that a specific event will happen

Benchmark: The student will apply concepts of data analysis and probability in a problem-solving situation.

General Math Content

<u>Standard:</u> The student will demonstrate understanding of numbers and operations.

Benchmark: The student will apply measures and variables.

Benchmark: The student will recognize patterns with operations.

- Adding and subtracting
- Multiplying and dividing

Benchmark: The student will solve fraction using operations.

- Adding and subtracting
- Multiplying and dividing
- Solve problems using estimation and rounding

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will:

- Use systems of measurement.
- Recognize characteristics of plane figures and solids.
- Use formulas for plan figures and solids.

<u>Standard</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will:

- Use ratio, proportion, and percent to represent data.
- Use probability concepts.
- Apply statistical concepts.

<u>Standard</u>: The student will use strategies to solve problems.

Pre-Algebra

<u>Standard:</u> The student will demonstrate understanding of numbers and operations.

Benchmark: The student will:

- Compare and order integers in a variety of forms.
- Use number theory concepts.
- Compute with rational numbers.

<u>Standard</u>: The student will demonstrate the understanding of Algebra.

Benchmark: The student will;

- Understand relationships among variable and number.
- Simplify algebraic expressions.
- Use variables and constants in relations and functions.

Benchmark: The student will use variables in equations and inequalities.

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will:

- Identify and use properties of similar figures.
- Understand characteristics of plane figures and solids.
- Use formulas for plane and solid figures.

<u>Standard</u>: The student will demonstrate understanding of data analysis and probability.

Westwood Community Schools Standards and Benchmarks Benchmark: The student will use ratios and proportions to solve problems.

Benchmark: The student will use appropriate statistical representations.

<u>Standard</u>: The student will use strategies to solve problems.

<u>Algebra I</u>

<u>Standard</u>: The student will demonstrate understanding of number and operations.

Benchmark: The student will;

- Understand order of operations and mathematical properties.
- Understand the real number system.
- Use numerical and algebraic symbols appropriately.

<u>Standard</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will use variables and constants in relations and functions.

Benchmark: The student will use variables in equations and inequalities.

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will:

- Understand the relationships between graphic and algebraic representation of lines.
- Model situations geometrically to solve problems.
- Use measurements in a variety of applications.

<u>Standard</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will use statistical and probability concepts to solve problems.

Geometry

<u>Standard</u>: The student will demonstrate understanding of numbers and operations.

<u>Standard</u>: The student will demonstrate an understanding of algebra.

Benchmark: The student will use proportions to explore and identify parallel lines and similar polygons.

Westwood Community Schools Standards and Benchmarks <u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will:

- Identify points, lines and planes
- Identify and classify angles
 - Transversals
- Investigate parallel and perpendicular lines
- Use postulates and theorems in deductive and inductive reasoning to complete proofs and conjectures
- Identify and solve congruent triangles
- Explore circles
- Identify polygons and their properties
- Apply formulas to find area, surface area, and volume
- Use a compass and straightedge to complete constructions

<u>Standard</u>: The student will demonstrate an understanding of data analysis and probability.

<u>Standard</u>: The student will use strategies to solve problems.

Algebra II

<u>Standard</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will:

- Perform mathematical operations with complex numbers, functions and matrices
- Develop a deeper understanding of scientific notation
- Simplify radicals
- Use counting techniques permutations and combinations

<u>Standard</u>: The student will demonstrate understanding of algebra.

Benchmark: The student will:

- Simplify algebraic, rational, and polynomial expressions
- Solve equations and inequalities including those with absolute values, core indicator, rational and radical terms
- Create and interpret linear functions
- Solve systems of equalities using graphic, algebraic, analytical and matrix method
- Graph, analyze and solve quadric equations
- Explore series and sequences
- Explore exponential and logarithmic functions

Benchmark: The student will:

- Perform transformations by the use of matrices
- Graph conic sections using coordinate geometry
- Use trigonometric relationships to determine lengths and angles

<u>Standard</u>: The student will demonstrate understanding of data analysis and probability.

Benchmark: The student will:

- Model and interpret data by use of a scatter plot
- Determine probabilities involving independent, dependent, and mutually exclusive and inclusive events
- Explore measures of central tendency and variation

<u>Standard</u>: The student will use strategies to solve problems.

Benchmark: The student will:

• Apply and adopt a variety of appropriate strategies to solve problems

Probability and Statistics

<u>Standard</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will use a variety of counting methods including permutations and combinations.

Standard: The student will demonstrate understanding of algebra.

Benchmark: The student will:

- Determine the amount of correlation between two variables
- Calculate linear regression

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

Benchmark: The student will:

• Create and interpret data using graphical means including line, bar, circle, and pictographs and histograms, scatter plots, stem-and-leaf, and box and whisker

Benchmark: The student will:

- Calculate measures of central tendency and variation
- Interpret stand deviations including using Chebeyshev's Theorem, core indicators, percentiles, and z-scores
- Understand the concepts and compute the probability of a compound event and conditional probability and independent events
- Use and apply a variety of probability distributions
- Apply the normal curve to solve probabilities
- Explore a variety of sampling techniques
- Predict population parameters based on samples
- Use samples to test hypothesis about population parameters by a variety of methods
- Test statistical significance by suing the chi-squared distribution and core indicators by single factor ANOVA
- Test significance of parameters by non parametric methods

<u>Standard</u>: The student will use strategies to solve problems:

Benchmark: The student will:

• Make statistical inferences using a variety of methods

Trigonometry/Advanced Math

<u>Standard</u>: The student will demonstrate understanding of numbers and operations.

Benchmark: The student will identify the domain and range of algebra.

<u>Standard</u>: The student will demonstrate an understanding of algebra.

Benchmark: The student will:

- Explore vectors
- Recognize, solve and graph conic sections
- Use polar and rectangular coordinates and complex numbers

<u>Standard</u>: The student will demonstrate an understanding of data analysis and probability.

Benchmark: The student will use formulas to solve probability.

• Permutations

- Combinations
- Conditional probability
- Binomial theorem

<u>Standard</u>: The students will us strategies to solve problems.

Benchmark: The student will:

- Use a graphing calculator as a device to solve problems
- Apply problem solving methods

Calculus

<u>Standard</u>: The student will demonstrate understanding of numbers and operations.

<u>Standard:</u> The student will demonstrate understanding of algebra.

Benchmark: The student will:

- Find limits of functions by use of graphical, analytical, and algebraic methods
- Understand the properties of continuous functions
- Prove limits using epsilon and delta
- Use a variety of methods such as the definition, power, and quotient, product, and chain rules to calculate derivatives of single variable and implicit functions
- Approximate the numerical value of derivatives
- Analyze functions of one variable by investigating rates of change, intercepts, zeros, asymptotes and local and global behavior
- Calculate antiderivatives and definite and indefinite integrals using a variety of methods
- Approximate values of integrals

<u>Standard</u>: The student will demonstrate understanding of geometry and measurement.

<u>Standard</u>: The student will use strategies to solve problems.

Benchmark: The student will:

- Apply derivative to solve problems including slope, tangent lines, linear approximations, related rates, curve sketching and optimization
- Solve problems with exponential and logarithmic functions

Physical Education Standards and Benchmarks

GRADES KINDERGARTEN THROUGH EIGHTH

1. STUDENTS DEMONSTRATE COMPETENT SKILLS IN A VARIETY OF PHYSICAL ACTIVITIES AND SPORTS.

GRADES K-4.

- A. DEMONSTRATING EVEN RHYTHMIC LOCOMOTOR MOVEMENTS: WALK, RUN, LEAP, HOP, JUMP AND UNEVEN RHYTHMIC LOCOMOTOR MOVEMENTS: GALLOP, SLIDE AND SKIP.
- B. DEMONSTRATING DYNAMIC AND STATIC BALANCE, WITH CONTROL, ON A VARIETY OF MOVING AND STATIONARY OBJECTS OR EQUIPMENT.
- C. DEMONSTRATING MATURE PATTERNS IN THE FUNDAMENTAL MANIPULATIVE SKILLS: THROW, CATCH, KICK TRAP, ROLL, DRIBBLE, STRIKE AND VOLLEY.
- D. DEVELOPING PATTERNS AND COMBINATIONS OF MOVEMENT INTO REPUTABLE SEQUENCES.
- E. DEMONSTRATING THE ABILITY TO CHANGE DIRECTIONS (DODGE), TRANSFER WEIGHT (FEET TO HANDS) AND FALL WITH CONTROL.

GRADES 5-8

- A. INCORPORATING BASIC DEFENSIVE AND OFFENSIVE STRATEGIES IN MODIFIED NET GAMES (NEWCOMB AND VOLLEYBALL) AND INVASIVE GAMES (KICKBALL AND BASKETBALL).
- B. COMBINING SKILLS TO COMPETENTLY PARTICIPATE IN A VARIETY OF INDIVIDUAL, TEAM AND DUAL SPORTS (BASKETBALL,

Westwood Community Schools Standards and Benchmarks SOFTBALL, VOLLEYBALL, TRACK AND FIELD, FLOOR HOCKEY AND TUMBLING).

- C. DEMONSTRATING A RHYTHMIC ACTIVITY SUCH AS ROPE JUMPING.
- 2. STUDENTS DEMONSTRATE COMPETENCY IN PHYSICAL FITNESS.

GRADES K-4

- A. PERFORMING AEROBIC AND ANAEROBIC SELF-TESTING ACTIVITIES.
- B. MAINTAINING APPROPRIATE BODY ALIGNMENT WHILE PERFORMING FITNESS ACTIVITIES.
- C. CONTROLLING AND SUPPORTING BODY WEIGHT IN A VARIETY OF FITNESS ACTIVITIES.

GRADES 5-8

- A. DEMONSTRATING VARIOUS TECHNIQUES, SAFETY FACTORS AND KNOWLEDGE REQUIRED IN A VARIETY OF MUSCULAR ENDURANCE AND STRENGTH ACTIVITIES.
- B. PARTICIPATING IN A VARIETY OF AEROBIC AND ANAEROBIC ACTIVITIES TO ATTAIN CARDIOVASCULAR ENDURANCE.
- C. DEMONSTRATING CORRECT TECHNIQUES FOR INCREASING AND MAINTAINING FLEXIBILITY.
- D. DEMONSTRATING CORRECT TECHNIQUES FOR WARMING UP AND COOLING DOWN PRIOR TO AND FOLLOWING AEROBIC AND ANAEROBIC EXERCISE.
- E. DEMONSTRATING HOW PHYSICAL FITNESS INCREASES WELLNESS.

3. STUDENTS DEMONSTRATE THE KNOWLEDGE OF FACTORS IMPORTANT TO PARTICIPATION IN PHYSICAL ACTIVITY.

- A. DEMONSTRATING KNOWLEDGE OF GAMES, RULES, AND SPORTSMANSHIP.
- B. DEMONSTRATING KNOWLEDGE OF THE FUNDAMENTAL COMPONENTS, STRATEGIES, EQUIPMENT AND TECHNOLOGY USED FOR PARTICIPATION IN A VARIETY OF PHYSICAL ACTIVITIES.
- C. DESCRIBING THE HEALTHFUL BENEFITS THAT RESULT FROM REGULAR AND SAFE PARTICIPATION IN PHYSICAL ACTIVITY.
- D. IDENTIFYING THE ORIGINS OF PHYSICAL EDUCATION ACTIVITIES THROUGH LOW ORGANIZED GAMES.
- E. DEMONSTRATING KNOWLEDGE OF THE MATURE STAGE OF FUNDAMENTAL MOVEMENT SKILLS

GRADES 5-8

- A. DEMONSTRATING KNOWLEDGE OF THE FACTORS IN BOTH HEALTH-RELATED AND PERFORMANCE-RELATED FITNESS.
- B. DEMONSTRATING KNOWLEDGE OF DEFENSIVE AND OFFENSIVE STRATEGIES IN LEAD-UP GAMES AND SPORTS.
- C. DEMONSTRATING KNOWLEDGE OF COMPLEX MOVEMENT SKILLS USED IN PHYSICAL ACTIVITIES.
- D. DETECTING, ANALYZING, AND CORRECTING ERRORS IN PERSONAL PERFORMANCE.

PHYSICAL EDUCATION STANDARDS AND BENCHMARKS GRADES NINE THROUGH TWELVE

1. STUDENTS DEMONSTRATE COMPETENT SKILLS IN A VARIETY OF PHYSICAL ACTIVITIES AND SPORTS.

A. DEMONSTRATE COMPETENCY IN ONE TEAM RELATED ACTIVITY OR SPORT THROUGH THE EXECUTION OF DEFENSIVE AND OFFENSIVE STRATEGIES AND SKILLS.

a.l. uses a variety of skills appropriately within a game situation. (Softball, Hockey,

Volleyball)

b.2. selects and uses the appropriate offensive and defensive strategies in a variety of team activities.

B. DEMONSTRATING COMPETENCY IN ONE INDIVIDUAL ACTIVITY.

b.l. uses a variety of skills appropriately within the individual game. (Bowling, Golf)

b.2. selects and uses appropriate strategies within the game.

C. DEMONSTRATING COMPETENCY IN ONE DUAL SPORT OR GAME DISPLAYING AN UNDERSTANDING OF HOW IT IS PLAYED.

c.l. uses a variety of skills appropriately within the game. (Table Tennis, Pickle

Ball)

c.2. selects and uses appropriate strategies within the game.

2. STUDENTS DEMONSTRATE COMPETENCY IN PHYSICAL FITNESS

A. STUDENT RECOGNIZES THE COMPONENTS OF HEALTH RELATED FITNESS

- a.l. understands cardiovascular health, muscular strength, muscular endurance, and flexibility.
- B. STUDENT WILL TAKE AN ACTIVE ROLL IN MAINTING APPROPRIATE PERSONAL FITNESS
 - b.1. actively participates in the variety of activities provided to enhance a healthy personal fitness level.
- C. UNDERSTAND HOW TO MAINTAIN A HEALTHY ACTIVE LIFESTYLE, THE OPPORTUNITES AVAILABLE, AND THE VARYING REQUIREMENTS FOR THAT PHYSICAL ACTIVITY
 - c.1. realizes the components necessary to carry on a healthy lifestyle.

- c.2. understands the services available to them for their physical pursuits. (Fitness Centers, Golf Courses, Hiking Trails)
- c.3. realizes the factors involved in lifetime participation of physical activities. (Cost, Time, Participation Requirements)

3. STUDENTS DEMONSTRATE THE KNOWLDEDE OF FACTORS IMPORTANT TO PARTICIPATION IN PHYSICAL ACTIVITY.

- A. DEMONSTRATING COOPERATIVE PARTICIPATION WHEN ENGAGED IN COMPETITIVE PHYSICAL ACTIVITIES BY FOLLOWING THE RULES AND REGULATIONS SPECIFIC TO THAT ACTIVITY.
 - a.1. exhibit cooperation, follow rules, demonstrate personal sacrifice, and show principals of teamwork in all activities.
- B. IDENTIFYING PERFORMANCE RELATED FACTORS THAT CONTRIBUTE TO PARTICIPATION IN PHYSICAL ACTIVITY.

b.1. realize the skills and fitness level required to pursue different activities.

- C. EVALUATING RISKS AND SAFETY FACTORS THAT MAY AFFECT PHYSICAL ACTIVITY THROUGHTOUT LIFE.
 - c.l. physical injury, property/equipment damage, and personal responsibility in preventing injury.
- D. UNDERSTANDING BIOMECHANICAL PRINCIPALS INVOLVED IN SPORTS TO IMPROVE PERFORMANCE AND PREVENT INJURY.

d.1. knows the principals of different movements. (Running, Kicking, Throwing)

Science Standards and Benchmarks

Grades Kindergarten-Second

Standard 1: Scientific Inquiry-Students understand the nature of scientific knowledge and enterprise, and apply the process of scientific inquiry.

1.K-2.1 Benchmark 1: Ask questions about objects, organisms, and events in the environment.

- Students ask questions about organisms, objects, and environmental events
- Students identify questions about the properties of solids and liquids
- Students observe, classify, and infer information about organisms in their environment

1.K-2.2 Benchmark 2: Conduct simple investigations.

- Compares similarities and differences in objects, organisms, and physical events
- Students identify similarities and differences in solids and liquids
- Students observe force of air pressure and changes that occur in weather
- Students identify motions of air currents

1.K-2.3 Benchmark 3: Uses tools to gather data and extend the senses

- Use magnifying glasses to collect data
- Students separate the solids into various sizes
- Students use weather website to investigate to investigate daily weather conditions
- Students use tools to measure weather conditions

1.K-2.4 Benchmark 4: Use mathematics in scientific inquiry.

- Counts points of leaves
- Students use a balance scale
- Students use rulers to measure
- Students read a thermometer
- Students will determine mass of rocks
- Students record mathematical data to see growth and changes in insects
- Students add and subtract temperatures to record differences

1.K-2.5 Benchmark 5: Use data to construct reasonable explanations

- Students use data from previous day experiment to plot outcome of our hypothesis
- Students correlate wind direction and rainfall data

1.K-2.6 Benchmark 6: Communicate investigations and explanations orally, in writing or through drawings

- Students communicate questions and learned knowledge orally and through drawings
- Students draw, label and discuss experiments in our lab books
- Students organize and communicate observations through drawings and writings
- Students record vocabulary words in notebooks
- Students use Venn Diagrams to compare and contrast

1.K-2.7 Benchmark 7: Follow appropriate safety procedures when conduction investigations

- Students will demonstrate appropriate procedures for smelling a substance
- Students follow posted safety rules

Standard 2: Life Science-Students know and understand the characteristics, structure, and function of organisms and their systems; the processes of life, and how organisms interact with each other and their environment

2.K-2.1 Benchmark 1: Understands the characteristics of living things and how living things are both similar to and different from each other and from non-living things

- Distinguishes living from non-living things
- Students use a Venn Diagram to compare similarities and differences of living organisms

2.K-2.2 Benchmark 2: Understands life cycles of plants and animals

• Students observe and record a life cycles

2.K-2.3 Benchmark 2: Understands the basic needs of plants and animals and how they interact with each other and their physical environment

- Identifies water, food, and shelter as basic needs of animals and human beings
- Identifies water, light, and soil as basic needs of plants
- Students create an appropriate habitat that accounts for the needs of an organism

2.K-2.4 Benchmark 4: Understands ways to help take care of the environment

• Students demonstrate a willingness to reduce, reuse and recycle

2.K-2.5 Benchmark 5: Understands the fundamental human body parts and their functions

- Identifies basic body parts
- Students identify 7 systems in our body and tell one important function of each

2.K-2.6 Benchmark 6: Understands good health habits

- Students demonstrates the understanding of the importance of dental hygiene
- Students identify and demonstrate the benefits of healthy habits

Standard 3: Physical Science-Students know and understand the interactions between, the changes in, and the properties of matter, energy, forces and motion

3.K-2.1 Benchmark 1: Understand observable and measureable properties of objects

• Students observe measuring volume and mass

3.K-2.2 Benchmark 2: Understand characteristics of liquids and solids

- Students will conduct various experiments to compare the properties of liquids and solids
- Students observe that liquids take the shape of its container and water seeks its lowest level

3.K-2.3 Benchmark 3: Understands the positions and motions of objects

- Uses the force of magnets to create motion
- Students observe cloud types, weather, and temperature conditions
- Students observe evidence of wind speed
- Students create kites and observe the effects of wind direction and speed
- Students compare conditions using the Beaufort scale

Standard 4: Earth and Space Science-Students will understand the structures and changes of the earth and universe

4.K-2.1 Benchmark 1: Understands properties of earth materials

• Students recognize that silt, sand, pebbles, and rocks are different sizes or the same material

4.K-2.2 Benchmark 2: Understands observable information about daily and seasonal weather conditions

- Identifies the 4 seasons of the year
- Students compare monthly and seasonal weather conditions using line graphs

4.K-2.3 Benchmark 3: Understands events around us that have repeating patterns including the seasons of the year, day and night

- Students examine movement of celestial objects
- Students examine phases of the moon

Grades 3-5

Standard 1: Scientific Inquiry-Students will understand the nature of scientific knowledge and enterprise, and apply the process of scientific inquiry.

1.3-5.1 Benchmark 1: Generate questions that can be answered through scientific investigations.

• Engages in questions about scientific situations

Westwood Community Schools Standards and Benchmarks 1.3-5.2 Benchmark 2: Recognize, plan, and conduct different kind of scientific investigations

- Practice and apply concepts of the scientific method
- Test variables in scientific investigations
- Design controlled experiments

1.3-5.3 Benchmark 3: Use appropriate tools, techniques, and safety procedures while gathering, processing and analyzing data

• Use equipment such as scales, masses, calculators, measuring tools, magnifying glasses, chemicals and safety equipment to conducts scientific inquiries

1.3-5.4 Benchmark 4: Incorporate mathematics in science inquires

• Find averages, measure and compare data, create graphs, use mathematical operations and estimating while conducting investigations

1.3-5.5 Benchmark 5: Use evidence to develop and communicate reasonable scientific procedures and explanations

- Record data in lab books or journals
- Create vocabulary banks and inquiry charts
- Record data on a graph

Standard 2: Life Science-Students know and understand the characteristics, structure, and function of organisms and their systems; the processes of life, and how organisms interact with each other and their environment.

2.3-5.1 Benchmark 1: Understand and demonstrate knowledge of structures, characteristics, and adaptations of organisms

- Identify the structure of seeds and organisms
- Identify adaptations of animals

2.3-5.2 Benchmark 2: Understand and demonstrate knowledge of how individual organisms are influenced by internal and external factors

- Identify why organisms have territories
- Identify how living organisms function in growth and survival
- Identify effects of exercise on the human body

2.3-5.3 Benchmark 3: Understand and demonstrate knowledge of basic human body systems and how they work together

- Identify the basic parts and functions of the brain and skin
- Identify names and locations of most important bones, joints, and muscles in the human skeleton
- Demonstrate how bones and muscles work together
- Test stimuli and responses
- Identify that cells, tissues, and organs are building blocks of body systems

2.3-5.4 Benchmark 4: Understand and demonstrate knowledge or personal health and wellness issues

- Identify three nutrients
- Describe the food pyramid
- Distinguish healthy hygiene practices
- Identify the stages of puberty in males and females

Standard 3: Physical Science-Students know and understand the interactions between, the changes in, and the properties of matter, energy, forces and motion.

3.3-5.1 Benchmark 1: Understand and demonstrate knowledge of how to describe and identify substances based on characteristic properties

- Observe, compare, and write the properties of different foods and rocks
- Observe and compare properties of various solids
- Identify mystery substances by observing properties

3.3-5.2 Benchmark 2: Understand and demonstrate knowledge of state of matter and changes in matter and changes in states of matter

- Conduct experiments using solids and liquids to make solutions
- Investigate characteristics of solutions
- Identify and compare the states of matter

3.3-5.3 Benchmark 3: Understand and demonstrate knowledge of the concept of conservation of mass/matter

- Compare the mass of mixture of the mass of its parts
- Measure volume and mass of the states of matter

3.3-5.4 Benchmark 4: Understand and demonstrate knowledge of the characteristic properties of electricity and magnetism

- Explore properties of permanent magnets
- Measure and investigate changes in the force of attraction between magnets
- Identify essential components and functions of various electric circuits
- Identify conductors and insulators
- Investigate functions of electromagnets

3.3-5.5 Benchmark 5: Understand and demonstrate knowledge of how forces are related to an object's motion

- Define force and its effects on objects
- Understand that friction is a force that opposes motion

3.3-5.6 Benchmark 6: Understands and demonstrates knowledge of chemical reactions

- Investigate properties of chemical reactions
- Compare products of chemical reactions

3.3-5.7 Benchmark 7: Understands and demonstrates knowledge of transitions of energy between various forms

- Describe different forms of energy and how it is transferred
- Define the "law of conservation of energy"
- State ways heat can be transferred
- Explain uses and conservation of energy

Standard 4: Earth and Space Science-Students will understand the structures and changes of the earth and the universe.

4.3-5.1 Benchmark 1: Understand and demonstrate knowledge of properties and uses of the earth materials

- Classify rocks and minerals by their characteristics
- Analyze how properties of rocks and minerals determine how they are used

4.3-5.2 Benchmark 2: Understand and demonstrate knowledge of processes and changes in the earth's structure

- Explore how volcanic activity affects the earth's structure
- Distinguish causes of weathering and erosion
- Explore steps of the rock cycle

4.3-5.3 Benchmark 3: Understand and demonstrate knowledge of fossils and the evidence they provide of past life on earth

• Analyze the content of sedimentary rock to find evidence of the past

4.3-5.4 Benchmark 4: Understand and demonstrate knowledge of weather and the atmosphere

- Identify layers of the atmosphere
- Identify differences between climate and weather
- Describe basic cloud types and weathering conditions associated with each type

Grades 6-8

Standard 1: Scientific Inquiry-Students understand the nature of scientific knowledge and enterprise, and apply the process of scientific inquiry.

1.6-8.1 Benchmark 1: Generate questions that can be answered through scientific investigation

• Engages in questions about scientific situations

1.6-8.2 Benchmark 2: Design and conduct different kinds of scientific investigations

• Design controlled experiments

• Practice and apply concepts of scientific method

1.6-8.3 Benchmark 3: Select and use appropriate tools and techniques to gather, analyze and interpret data

• Use thermometers, triple beam balances, graduated cylinders, beakers, rulers and calculators in order to collect data

1.6-8.4 Benchmark 4: Incorporate mathematics in scientific inquiry

• Calculate averages, forces, surface area, and energy

1.6-8.5 Benchmark 5: Use evidence to develop explanations and predictions while recognizing alternatives

- Develop hypothesis
- Compare result outcomes to predictions
- Record data

1.6-8.6 Benchmark 6: Communicate and defend procedures, explanations, and outcomes

- Report findings
- Explain and justify conclusions

1.6-8.7 Benchmark 7: Use appropriate safety procedures when conduction investigations

- Use safety goggles, lab aprons, rubber gloves
- Maintain clean working environments

Standard 2: Life Science-Students know and understand the characteristics, structure, and function of organisms and their systems; the process of life, and how organisms interact with each other and their environment.

2.6-8.1 Benchmark 1: Understand and demonstrate knowledge of the basic components and functions of cells, tissues, organs, and systems

- Diagram and label plant and animal cells
- Discuss interconnection between systems

2.6-8.2 Benchmark 2: Understands and demonstrates the knowledge of principles of heredity

- Describes types of reproduction (asexual, sexual)
- Predict and determine offspring

2.6-8.3 Benchmark 3: Understands and demonstrates the knowledge of the relationships among organisms and their physical environment including environmental issues

- Participate in Environment Awareness Week and recycling programs
- Recycling programs
- Diagram food chains
- Classify characteristics of kingdoms

• Identify needs of plants and animals

2.6-8.4 Benchmark 4: Understands and demonstrates the knowledge of the functions and interconnections of the major human body systems including affects of disease

- Demonstrate peristalsis
- Test muscle size and strength, fatigue
- Use heart pump model
- Measure reaction time and lung capacity
- Model respiration, digestion, and joints

2.6-8.5 Benchmark 5: Understands and demonstrate knowledge of personal health and wellness issues

• The student will tell how certain communicable diseases are spread and sthe stages through which they progress

Standard 3: Physical Science-Students know and understand the interactions between, the changes in, and the properties of matter, energy, forces and motion

3.6-8.1 Benchmark 1: Understand and demonstrate knowledge of the structure and properties of matter

- Understand the parts of the atom
- Understand the states and characteristics of matter (solid, liquid, gas)
- Be introduced to the periodic table
- Students will give examples of the effects of static electricity
- Describe and define current electricity
- Describe characteristics of electromagnetic waves

3.6-8.2 Benchmark 2: Understand and demonstrate knowledge of the sources and properties of energy

- Understand the difference between potential energy and kinetic energy
- Identify various forms of energy-light, sound, heat
- Give examples of the effects of static electricity
- Define and describe current electricity
- Describe characteristics of electromagnetic waves

3.6-8.3 Benchmark 3: Understand and demonstrate the knowledge of forces and motion

• Understands and applies Newton's Laws

Standard 4: Earth and Space Science-Students will understand the structures and changes of the earth and universe

4.6-8.1 Benchmark 1: Understand and demonstrate knowledge of the processes of the hydrosphere and the atmosphere.

- Identify and understand the causes of catastrophic weather events
- Identify, measure, and record elements of weather
- Identify movements of water

4.6-8.2 Benchmark 2: Understand and demonstrate knowledge of the Earth's composition, structures and changes

- Participate in soil testing
- Identify agents and effects of erosion
- Identify effects of movement of underground structures
- Describe history and changes of the earth

4.6-8.3 Benchmark 3: Understand and demonstrate the knowledge of the composition and structures of space and the universe.

- Model sizes and dynamic distances within the solar system
- Describe characteristics and components of stars and galaxies while classifying
- Describe how the sun, earth, and moon work as a system
- Model the effects of impacts on planetary surfaces, phases of the moon, and the seasons

Science Standards & Benchmarks

(Grades 9 – 12)

Standard 1: Scientific Inquiry – Students understand the nature of scientific knowledge and enterprise, and apply the process of scientific inquiry.

1.9-12.1 Benchmark One: Designs and conducts scientific investigations.

- Generates investigatable questions and formulates testable hypothesis
- Utilizes controls, identifies and limits variables and makes accurate measurements
- Interpret data and uses evidence to generate explanation

1.9-12.2 Benchmark Two: Uses technology and mathematics to improve investigations.

- Use variety of technology (computer lab, graphing calculators)
- Use appropriate charts and graphs
- Use formulas and accurate measurements

1.9-12.3 Benchmark Three: Formulates and revises scientific explanations and models using logic and evidence.

- Formulate an explanation or model
- Revise explanations based on scientific knowledge

1.9-12.4 Benchmark Four: Communicates and defends a scientific argument.

- Summarize data
- Defend findings with evidence to peers
- Illustrate and explain concepts

Standard 2: Life Science – Students know and understand the characteristics, structure, and function of organisms and their systems; the processes of life, and how organisms interact with each other and their environment.

2.9-12.1 Benchmark One: Understands and applies knowledge of the cell.

- Identify differences between plant and animal cells
- Diagram or model plant and animal cell structures and explain their functions

2.9-12.2 Benchmark Two: Understands and applies knowledge of heredity.

- Demonstrates the cell cycle by making a model of and diagram the stages of cell division
- Demonstrate knowledge of terminology of Mendelian genetics
- Use Punnett squares to diagram different types of crossings
- 2.9-12.3 Benchmark Three: Understands and applies knowledge of biological evolution.
 - Demonstrate knowledge of organization and classifying
 - Identify adaptations organisms have to their environment
 - Identify different invertebrate and vertebrate animals into their phylums/class

2.9-12.4 Benchmark Four: Understands and applies knowledge of the interdependence of organisms.

- Identify example and basic characteristics of the different kingdoms
- Identify relationships between plants and animals

2.9-12.5 Benchmark Five: Understands and applies knowledge of matter, energy, and organization in living systems.

- Identify the different parts of an ecosystem
- Diagram food chains and webs and use to make an energy pyramid
- Identify the purpose of ATP and photosynthesis
- Identify and label the plant parts and basic functions
- Identify the different parts of human systems, their basic functions, and how they work together
- Identify how different systems affect others to keep homeostasis in our body
- 2.9-12.6 Benchmark Six: Understands and applies knowledge of the behavior of organisms.
 - Site examples of animal behavior (courtship)
 - Identify different types of behavior both plant and animal (parasite)
 - Identify how animal senses detect environmental input

Standard 3: Physical Science – Students know and understand the interactions between, the changes in, and the properties of matter, energy, forces and motion.

- 3.9-12.1 Benchmark One: Understands and applies knowledge of the structure and properties of matter.
 - Demonstrate knowledge of the structure and organization of the atom
 - Demonstrates knowledge of nuclear reactions
 - Demonstrate knowledge of how elements are arranged in the periodic table
 - Demonstrate knowledge of how the electron configuration of atoms governs the chemical properties of an element as atoms interact
- 3.9-12.2 Benchmark Two: Understands and applies knowledge of the sources and properties of energy.
 - Demonstrates knowledge of the law of conservation of energy
 - Distinguish between kinetic, potential, and energy contained by a field
 - Demonstrate knowledge of waves
- 3.9-12.3 Benchmark Three: Understands and applies knowledge of forces and motion.
 - Demonstrates and applies knowledge of the laws of motion
 - Demonstrate knowledge of friction
 - Demonstrate knowledge of gravitational force
 - Demonstrate knowledge of the relationship between electricity and magnetism
- 3.9-12.4 Benchmark Four: Understands and applies knowledge of chemical reactions.
 - Demonstrate knowledge of chemical reactions including energy and reaction rate
 - Demonstrate knowledge of the mole concept

Standard 4: Earth and Space Science – Students will understand the structures and changes of the earth and universe.

- 4.9-12.1 Benchmark One: Understand and demonstrate knowledge of the processes that change the earth's structures.
 - Use of Plate Tectonic theory to predict the geographic features
 - Identify movements of water in the three states
- 4.9-12.2 Benchmark Two: Understand and demonstrate the human impact of alterations in earth's natural processes.
 - Describe affects of dams, dikes and levees

- Describe environmental changes induced by human interactions
- 4.9-12.3 Benchmark Three: Understands and applies knowledge of energy in the earth system.
 - Defines internal and external sources of energy
 - Describes energy transfer in the atmosphere, ocean and lithosphere

Social Studies Standards and Benchmarks

Grades K-12

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

1.K-2.1 Understand the role of language, customs, and traditions in cultures.

- Identify the impact of culture on the family.
- Explain how people, places, and environment influence the family.
- Give examples of how relationships influence family life.
- Compare past families to today's families
- Identify unique characteristics from different cultures

1.K-2.2 Understand the importance of valuing cultures different from one's own.

- Identify similarities and differences among people.
- Recognize the different kinds of communities and how they change over time.
- Recognize the various jobs and their impact in the community.
- Identify the differences between urban and rural communities

1.K-2.3 Understand the characteristics of individual and group behavior and interaction.

- Identify the basic needs of food, clothing, shelter, and love.
- Describe personal change over time.
- Identify and describe ways that family, groups, and communities influence your daily live and personal choices
- Knows that people belong to some groups because they are born into them and to some groups because they join them

Standard 2- Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

2.K-2.1 Understand the structures and purposes of governments.

- Know that the Constitution is the law of our country.
- Identify ways in which Americans honor their country

- 2.K-2.2 Know the responsibilities of citizenship and the components of civic participation.
 - Demonstrate characteristics of a good citizen
 - Know that voting is a basic responsibility
 - Know the responsibilities of a citizen in the classroom and the community
- 2.K-2.3 Analyze the relationship of democratic governments to other forms of governments.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

3.K-2.1 Understand the principles governing economic decision making.

- Explain why consumers must make choices based on wants and needs
- Knows how to make an economic decision on whether to spend or save money

3.K-2.2 Know the structure of the global economic systems.

- Explain the difference between consumers and producers
- Identify that the United States' money system has coins of different values.
- Identify goods and services in the community
- Knows that people pay a price when buying goods or services
- *3.K-2.3 Understand how interdependence affects the global marketplace.*
 - Knows how different parts of a community are interdependent

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

- 4.K-2.1 Discuss the land, climate, and resources of various regions.
 - Identify natural resources
 - Identify land forms
 - Describe how people have changed the land
 - Describe how weather influences people's daily choices
 - Identify the continents and oceans
 - Identify how climate can influence production
 - Knows the location of school, home, neighborhood, community, state, and country

- 4.K-2.2 Know the characteristics and purposes of geographic tools.
 - Identify a globe
 - Locate land and water on a globe
 - Identify the cardinal directions
 - Identify and interpret map keys, symbols, and title
- 4.K-2.3 Understand the interactions of geography and the physical and human environment.
 - Explain how recycling affects the environment

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

5.K-2.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.

- Identify how time and change affect family
- Describe how schools have changed using past, present, and future vocabulary
- Compare cultures of the past with the present

5.K-2.2 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Describe how American historical figures have impacted family life today.
- Identify Native Americans as the first Americans and recognize their contributions to our society both past and present.
- Describe cultural and national holidays and traditions

5.K-2.3 Analyzing and interpreting historical information.

• Gain an understanding of how our community evolves over time.

Grades 3-6

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

1.3-6.1 Understand the role of language, customs, and traditions in cultures.

• Identify customs and traditions within different cultures and civilizations.

- Compare customs and traditions from different cultures and civilizations.
- Identify things that make up a group's culture.
- Identify the impact of culture as it relates to the different regions of the United States.
- Analyze how language, customs, and traditions shape civilizations.

1.3-6.2 Understand the importance of valuing cultures different from one's

own.

- Distinguish features common to cultural groups (i.e. art, language, literature, music, foods, holidays)
- Give examples of how different cultures influence living in a community.
- Understand that all groups of people have customs.
- Give examples of how culture and society influence the regions of the United States.
- Identify religions of ancient civilizations.
- Examine the philosophy of Christianity, Buddhism, Daoism, and Confucianism.
- Compare and contrast the language, beliefs, and traditions of ancient civilizations.

1.3-6.3 Understand the characteristics of individual and group behavior and interaction.

- Analyze how an individual's background and history influence his or her actions in various situations and in the customs followed.
- Explain how settlers interacted with Native Americans in the United States regions.
- Explain why people came to America.
- Give examples of how relationships influence the regions of the United States.
- Analyze cooperation and conflict within ancient civilizations
- Compare and contrast social structures in ancient civilizations
- Analyze how social structure kept order in society

Standard 2- Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

- 2.3-6.1 Understand the structures and purposes of governments.
 - List the responsibilities of government (i.e. provide services, make laws, collect taxes to provide goods and services)
 - Name the branches of government (i.e. legislative, executive, judicial) and basic roles of each branch (i.e. make, enforce, and interpret laws)

- Name the branches of government, basic roles of each branch, and responsibilities of each level of government.
- Compare the three levels of government, (city, state, federal) showing similarities and differences.
- Describe the systems of government of earlier civilizations
- Compare and contrast different forms of government.

2.3-6.2 Know the responsibilities of citizenship and the components of civic participation.

- Explain the need to work cooperatively with others in a community and government in solving problems.
- Define citizen as a member of a community.
- Determine the representative acts of a good citizen (i.e. obey laws, vote, not littering)
- Identify the qualities of good citizenship (i.e. honesty, courage, and patriotism)
- Analyze the things Americans have in common.
- Demonstrate an understanding of how sharing responsibilities helps unite Americans.

2.3-6.3 Analyze the relationship of democratic governments to other forms of governments.

• Analyze reasons diverse groups of people come to North America

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

3.3-6.1 Understand the principles governing economic decision making.

- Describe how supply, demand, and competition affect consumers' decisions in choosing products.
- Summarize the costs and benefits of personal economic choices in a market economy.
- Differentiate between money and barter economies.
- Explain the impact of natural resources to the types of jobs.
- Analyze the working of a free enterprise economy, including the factors of supply and demand.
- Identify the impact of production, distribution and consumption on the regions of the United States.
- Analyze how innovations have changed various areas of economics

3.3-6.2 Know the structure of the global economic systems.

- Distinguish between import and export
- Analyze the working of a free enterprise economy, including the factors of supply and demand.

• Describe the economies of different regions in the past.

3.3-6.3 Understand how interdependence affects the global marketplace.

- Identify how global economic connections influence community life.
- Identify how global connections (cultural and geographic) influence life in the regions of the United States.
- Compare and contrast regions and the impact of trade on economy.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

4.3-6.1 Discuss the land, climate, and resources of various regions.

- List natural resources and their uses.
- Locate oceans, continents, and hemispheres on Earth
- Construct major landforms and bodies of water.
- List the major climate of each region in the United States.
- Explain how environment and physical features affect life in the regions of the United States.
- Evaluate the effect of large bodies of water on climate.
- Describe some physical features on which regions can be based.
- Evaluate how geography influenced the development of civilizations.
- Analyze the land, climate, and resources of ancient civilizations.

4.3-6.2 Know the characteristics and purposes of geographic tools.

- Use knowledge of map skills and symbols to create authentic maps.
- Use grid, map key, and compass rose to locate points on a map.
- Use distance scale to measure distance on a map.
- Use maps to determine locations due to latitude and longitude, including, but not limited to the North and South Pole, the Equator, the Tropics, and the Prime Meridian.
- Identify and label the states within each region of the United States.
- Identify and label major bodies of water in the United States.

4.3-6.3 Understand the interactions of geography and the physical and human environment.

- Explain how people, places, and environment influence living in a community.
- Explain why cities grew in the Northeast.
- Summarize how industries depend on rivers.
- Compare major rivers of the world.

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

5.3-6.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.

- Use a time line to determine the order of a historical sequence of events
- Create personal time lines from birth to present day.
- Identify how time, continuity, and change impact living in a community.
- Trace the causes of the dramatic decline in the number of farmers since 1900.
- Explain how railroads contributed to interdependence between farms and cities.
- Knows how to construct and interpret multiple tier time lines
- Knows how to interpret data presented in time lines

5.3-6.2 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Identify the Declaration of Independence and the Constitution and generalize their importance.
- Describe how inventions and technology have changed people's lives over time.
- Describe the change in the United States from an agricultural economy to an industrial economy.
- Compare and contrast cities of today with cities of the past.
- Compare and contrast civilizations of the past.
- Understands how economic, political and environmental factors influenced the development of early civilizations (i.e. Mesopotamia, Egypt, The Mayans, etc...)
- Understands the ancient writing forms of various civilizations (i.e. Mesopotamia, Egypt, Mayans, etc...)
- Understands the social, religious, and political structures of early civilizations.
- Understands characteristics of Mycenaean Greek civilization and culture
- Understands how *the development of technology affected early civilizations.*

5.3-6.3 Analyzing and interpreting historical information.

- Decide how literature, such as legends and tall tales has contributed to our national heritage.
- Assemble and interpret facts from the Constitution by using a variety of sources (i.e. book, video, and computer)

- Interpret symbols that have national meaning and identify the meaning of the symbol.
- Understand that the Constitution describes people's rights and establishes the three branches of the federal government.
- Understands what archaeological, artistic, and written sources can illustrate about early civilizations.

Grades 7-8

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

- 1.7-8.1 Understand the role of language, customs, and traditions in cultures.
 - Analyze how culture and society influenced world history.
 - Examine the role of religion in societies.
 - Examine the cultural influences in the United States.

1.7-8.2 Understand the importance of valuing cultures different from one's own.

- Identify how global connections (historical, cultural, geographic, technological, ethical and societal issues) influence societies.
- Discuss the development of different American cultural groups.
- Examine the history and cultural heritage of people around the world.

1.7-8.3 Understand the characteristics of individual and group behavior and interaction.

- Explain how culture and society influence individual and group identity.
- Describe the conflict of Native Americans and westward moving settlers in the U.S.

Standard 2-Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

2.7-8.1 Understand the structures and purposes of governments

- Analyze how the basic rights and responsibilities of individuals and the needs of society have been influenced by systems of authority and governance.
- Compare and contrast government systems in the world.
- List the rights English colonists brought to America.
- Explain why Britain tightened control over the colonies.

• Describe the system of government established by the Constitution.

2.7-8.2 Know the responsibilities of citizenship and the components of civic participation.

- Identify the benefits and challenges of the rights of citizenship.
- Explain why political disagreements developed between England and its colonies.
- Trace the events that led to open rebellion against the British.
- Trace the creation of the Constitution.
- 2.7-8.3 Analyze the relationship of democratic governments to other forms of governments.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

- 3.7-8.1 Understand the principles governing economic decision making.
 - Analyze how major economic forces and institutions influence individual decisions of producers, consumers, and investors.
 - Identify economic activities in the United States.
- 3.7-8.2 Know the structure of the global economic systems.
 - Analyze the positive and negative aspects of the various economic systems.
 - Evaluate how economic forces and factors shape a give culture and/or society

3.7-8.3 Understand how interdependence affects the global marketplace.

- Identify the impact of production, distribution and consumption of goods and services on countries in the world.
- Describe the countries of the world economic resources, activities, and challenges.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

- 4.7-8.1 Understand the interactions of geography and the physical and human environment.
 - Examine the relationship between geographic elements and concepts in history, government, and economics.

- Analyze the characteristics, distribution, and migration of human populations on the Earth's surface.
- Identify the five themes of geography and its role in studying geography.
- Describe how regional differences developed in the United States.
- Examine the impact of geography on historical events.

4.7-8.2 Know the characteristics and purposes of geographic tools.

- Interpret maps, graphs, charts, tables, diagrams, photographs, atlas, and film.
- Identify geographic skills and processes needed to interact in the world community.
- Identify and apply terms in geography.

4.7-8.3 Analyze the land, climate, and resources of various regions.

- Locate physical and cultural features of local, community, state, nation, and world.
- Identify geographical and political boundaries of the world.
- Analyze how climate affects the different regions of the world and their lifestyles.
- Compare geographical similarities and differences among regions of the world.

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

5.7-8.1 Understand how key events, people, and ideas contributed to Iowa history.

- Identify local changes in physical and cultural features.
- Identify key people in Iowa's history and present.
- Examine Iowa's governmental history and structure.
- Analyze Iowa's path to statehood.
- Describe Iowa's economy and major resources.
- Recognize the major animal groups of Iowa.
- Understand the major celebrations and events that take place in Iowa annually.

5.7-8.2 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.

- Describe how the first Americans developed ways of life.
- Explain why Europeans search for sea routes to Asia.
- Trace the American victory in the Revolution War.

- Trace the history and result of the Louisiana Purchase.
- Analyze the development of Antislavery Movement in America.
- Examine the acquisition of several territories in the expansion of the United States in the 1800s.
- Describe the events that lead to the U.S. Civil War.
- Trace the major events of the U.S. Civil War.

5.7-8.3 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Explain how Columbus's voyages led to further European exploration of the Americans.
- List the reasons why the Spanish started settlements in North America.
- Explain why other European nations began to challenge Spain's power.
- Explain the reasons why people chose to settle in the English colonies in the 1600s.
- List important inventions of the early 1800s.
- Describe the effects of the U.S. Civil War on Americans.
- Explain how the U.S. was affected by Reconstruction.

5.7-8.4 Analyzing and interpreting historical information.

- Explain the success of Jamestown and Plymouth
- Compare the way of life in the New England, Southern, and Middle colonies.
- Examine reasons for the colonies to declare independence.
- Explain why slavery divided the North and South.

Grades 9-12

Standard 1- Behavioral Studies - The students will be able to understand the diversity of social groups and their development.

1.9-12.1 Understand the role of language, customs, and traditions in cultures.

- Describe the impact of immigration on the United States.
- Examines the value of cultural diversity within and across groups.
- Identify individual cultural traits throughout different societies.

1.9-12.2 Understand the importance of valuing cultures different from one's own.

- Identify the impact of culture as it relates to U.S. history.
- Examine, interpret, and analyze cultural diversity among groups of people.

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1.9-12.3 Understand the characteristics of individual and group behavior and interaction.

- Explain how culture and society influence individual and group identity.
- Describe and compare how people create places that reflect culture, human needs, government policy, and current values.
- Demonstrate an awareness of the tolerant and intolerant behaviors of groups and individuals throughout history.
- Analyze and explain the ways groups, societies, and cultures address human needs and concerns.

Standard 2- Civics - The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

- 2.9-12.1 Understand the structures and purposes of governments.
 - Explain how people, places, and environment influence government/political systems.
 - Explain and describe how basic theories of government were created.
 - Describe the basic development and principles of the U.S. Constitution.
 - Describe how political parties were created and their effect on today's society.
- 2.9-12.2 *Know the responsibilities of citizenship and the components of civic participation.*
 - Examine the benefits and challenges of the rights of citizenship and how it played a role in U.S. history.
 - Provide examples of how the relationships between basic rights and responsibilities of individuals and the needs of society are affected by authority and governance.
- 2.9-12.3 Analyze the relationship of democratic governments to other forms of governments.
 - Identify how governmental systems are interdependent and interact with each other.
 - Compare and contrast different world governments to the U.S. government.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

3.9-12.1 Understand the principles governing economic decision making.

- Compare and contrast the world economic systems and their impact on world trade.
- Examine the laws of supply and demand.
- Analyze how the economy can shape world leaders, politics, and decision making.

3.9-12.2 Know the structure of the global economic systems.

- Evaluate how economic forces and factors shape a given culture and/or society.
- Identify how science and technology has impacted United States history.
- Provide examples of how economic forces and factors shape a given culture and/or society.

3.9-12.3 Understand how interdependence affects the global marketplace.

- Identify the impact of production, distribution and consumption of goods and services on United States history.
- Determine how governmental systems and economic systems are interdependent and interact with each other.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

4.9-12.1 Understand the interactions of geography and the physical and human environment.

- Examine the relationship between geographic elements and concepts in history, government, and economics.
- Examine how people, places, and environment influenced United States history.
- Describe the impact of climate on global economic systems.

4.9-12.2 Know the characteristics and purposes of geographic tools.

- Interpret maps, graphs, charts, tables, diagrams, photographs, atlas, and film.
- Create, interpret, use, and synthesize information from various representations of the earth, such as maps, globes, and photographs.
- 4.9-12.3 Analyze the land, climate, and resources of various regions.
 - Compare and evaluate alternative policies for the use of land and other resources in communities, regions, nations, and the world.

• Define climate and describe how it affects people in different places.

Standard 5-History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

5.9-12.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.

- Apply chronological thinking to describe and investigate historical events and time periods.
- Analyze and evaluate conditions, actions, and motivations that contribute to conflicts and cooperation within the United States and among other nations.
- Demonstrate understanding of cause and effects relationship of major U.S. wars.
- Evaluate the role of the U.S. being a world power, our influence, and responsibilities in the world.

5.9-12.2 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Identify how global connections (historical, cultural, geographic, technological, and societal issues) influenced U.S. History.
- Identify the impact of culture as it relates to U.S. History.
- Assess, analyze, and identify key leaders in the U.S. and the impact they had in U.S. History.
- Assess the impact of the Civil Rights Movement in American History.

5.9-12.3 Analyzing and interpreting historical information.

- Analyze, interpret, and evaluate information related to American History using primary sources.
- Examine the factors that contribute to different interpretations of the same historical event.
- Analyze and interpret historical documents throughout history.

Grades K-2

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

1.K-2.1 Understand the role of language, customs, and traditions in cultures.
Identify the impact of culture on the family.

- *Explain how people, places, and environment influence the family.*
- Give examples of how relationships influence family life.
- Compare past families to today's families
- Identify unique characteristics from different cultures
- 1.K-2.2 Understand the importance of valuing cultures different from one's own.
 - Identify similarities and differences among people.
 - *Recognize the different kinds of communities and how they change over time.*
 - Recognize the various jobs and their impact in the community.
 - Identify the differences between urban and rural communities
- 1.K-2.3 Understand the characteristics of individual and group behavior and interaction.
 - Identify the basic needs of food, clothing, shelter, and love.
 - Describe personal change over time.
 - Identify and describe ways that family, groups, and communities influence your daily live and personal choices
 - *Knows that people belong to some groups because they are born into them and to some groups because they join them*

Standard 2- Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

- 2.K-2.1 Understand the structures and purposes of governments.
 - *Know that the Constitution is the law of our country.*
 - Identify ways in which Americans honor their country
- 2.K-2.2 Know the responsibilities of citizenship and the components of civic participation.
 - Demonstrate characteristics of a good citizen
 - *Know that voting is a basic responsibility*
 - *Know the responsibilities of a citizen in the classroom and the community*
- 2.K-2.3 Analyze the relationship of democratic governments to other forms of governments.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

- 3.K-2.1 Understand the principles governing economic decision making.
 - Explain why consumers must make choices based on wants and needs
 - *Knows how to make an economic decision on whether to spend or save money*
- 3.K-2.2 Know the structure of the global economic systems.
 - Explain the difference between consumers and producers
 - Identify that the United States' money system has coins of different values.
 - Identify goods and services in the community
 - Knows that people pay a price when buying goods or services
- 3.K-2.3 Understand how interdependence affects the global marketplace.
 - Knows how different parts of a community are interdependent

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

- 4.K-2.1 Discuss the land, climate, and resources of various regions.
 - Identify natural resources
 - Identify land forms
 - Describe how people have changed the land
 - Describe how weather influences people's daily choices
 - Identify the continents and oceans
 - *Identify how climate can influence production*
 - *Knows the location of school, home, neighborhood, community, state, and country*
- 4.K-2.2 Know the characteristics and purposes of geographic tools.
 - *Identify a globe*
 - Locate land and water on a globe
 - Identify the cardinal directions
 - *Identify and interpret map keys, symbols, and title*
- 4.K-2.3 Understand the interactions of geography and the physical and human environment.
 - Explain how recycling affects the environment

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

- 5.K-2.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.
 - *Identify how time and change affect family*
 - Describe how schools have changed using past, present, and future vocabulary
 - Compare cultures of the past with the present
- 5.K-2.2 Understand how key events, people, and ideas contributed to U.S. History and World History.
 - Describe how American historical figures have impacted family life today.
 - Identify Native Americans as the first Americans and recognize their contributions to our society both past and present.
 - Describe cultural and national holidays and traditions
- 5.K-2.3 Analyzing and interpreting historical information.
 - Gain an understanding of how our community evolves over time.

Grades 3-6

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

- 1.3-6.1 Understand the role of language, customs, and traditions in cultures.
 - Identify customs and traditions within different cultures and civilizations.
 - Compare customs and traditions from different cultures and civilizations.
 - *Identify things that make up a group's culture.*
 - Identify the impact of culture as it relates to the different regions of the United States.
 - Analyze how language, customs, and traditions shape civilizations.

1.3-6.2 Understand the importance of valuing cultures different from one's own.

- Distinguish features common to cultural groups (i.e. art, language, literature, music, foods, holidays)
- *Give examples of how different cultures influence living in a community.*
- Understand that all groups of people have customs.

- *Give examples of how culture and society influence the regions of the United States.*
- Identify religions of ancient civilizations.
- *Examine the philosophy of Christianity, Buddhism, Daoism, and Confucianism.*
- Compare and contrast the language, beliefs, and traditions of ancient civilizations.

1.3-6.3 Understand the characteristics of individual and group behavior and interaction.

- Analyze how an individual's background and history influence his or her actions in various situations and in the customs followed.
- Explain how settlers interacted with Native Americans in the United States regions.
- Explain why people came to America.
- *Give examples of how relationships influence the regions of the United States.*
- Analyze cooperation and conflict within ancient civilizations
- Compare and contrast social structures in ancient civilizations
- Analyze how social structure kept order in society

Standard 2- Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

2.3-6.1 Understand the structures and purposes of governments.

- List the responsibilities of government (i.e. provide services, make laws, collect taxes to provide goods and services)
- Name the branches of government (i.e. legislative, executive, judicial) and basic roles of each branch (i.e. make, enforce, and interpret laws)
- Name the branches of government, basic roles of each branch, and responsibilities of each level of government.
- Compare the three levels of government, (city, state, federal) showing similarities and differences.
- Describe the systems of government of earlier civilizations
- Compare and contrast different forms of government.
- 2.3-6.2 Know the responsibilities of citizenship and the components of civic participation.
 - *Explain the need to work cooperatively with others in a community and government in solving problems.*
 - Define citizen as a member of a community.
 - Determine the representative acts of a good citizen (i.e. obey laws, vote, not littering)

- *Identify the qualities of good citizenship (i.e. honesty, courage, and patriotism)*
- Analyze the things Americans have in common.
- Demonstrate an understanding of how sharing responsibilities helps unite Americans.
- 2.3-6.3 Analyze the relationship of democratic governments to other forms of governments.
 - Analyze reasons diverse groups of people come to North America

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

3.3-6.1 Understand the principles governing economic decision making.

- Describe how supply, demand, and competition affect consumers' decisions in choosing products.
- Summarize the costs and benefits of personal economic choices in a market economy.
- Differentiate between money and barter economies.
- Explain the impact of natural resources to the types of jobs.
- Analyze the working of a free enterprise economy, including the factors of supply and demand.
- Identify the impact of production, distribution and consumption on the regions of the United States.
- Analyze how innovations have changed various areas of economics

3.3-6.2 Know the structure of the global economic systems.

- Distinguish between import and export
- Analyze the working of a free enterprise economy, including the factors of supply and demand.
- Describe the economies of different regions in the past.

3.3-6.3 Understand how interdependence affects the global marketplace.

- *Identify how global economic connections influence community life.*
- Identify how global connections (cultural and geographic) influence life in the regions of the United States.
- Compare and contrast regions and the impact of trade on economy.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

4.3-6.2

- Discuss the land, climate, and resources of various regions.
 - List natural resources and their uses.
 - Locate oceans, continents, and hemispheres on Earth
 - Construct major landforms and bodies of water.
 - List the major climate of each region in the United States.
 - Explain how environment and physical features affect life in the regions of the United States.
 - Evaluate the effect of large bodies of water on climate.
 - Describe some physical features on which regions can be based.
 - Evaluate how geography influenced the development of *civilizations*.
 - Analyze the land, climate, and resources of ancient civilizations.

4.3-6.2 Know the characteristics and purposes of geographic tools.

- Use knowledge of map skills and symbols to create authentic maps.
- Use grid, map key, and compass rose to locate points on a map.
- Use distance scale to measure distance on a map.
- Use maps to determine locations due to latitude and longitude, including, but not limited to the North and South Pole, the Equator, the Tropics, and the Prime Meridian.
- Identify and label the states within each region of the United States.
- Identify and label major bodies of water in the United States.
- 4.3-6.3 Understand the interactions of geography and the physical and human environment.
 - *Explain how people, places, and environment influence living in a community.*
 - *Explain why cities grew in the Northeast.*
 - Summarize how industries depend on rivers.
 - Compare major rivers of the world.

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

5.3-6.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.

- Use a time line to determine the order of a historical sequence of events
- Create personal time lines from birth to present day.
- *Identify how time, continuity, and change impact living in a community.*
- *Trace the causes of the dramatic decline in the number of farmers since 1900.*

- *Explain how railroads contributed to interdependence between farms and cities.*
- *Knows how to construct and interpret multiple tier time lines*
- Knows how to interpret data presented in time lines
- 5.3-6.2 Understand how key events, people, and ideas contributed to U.S. History and World History.
 - Identify the Declaration of Independence and the Constitution and generalize their importance.
 - Describe how inventions and technology have changed people's lives over time.
 - Describe the change in the United States from an agricultural economy to an industrial economy.
 - Compare and contrast cities of today with cities of the past.
 - Compare and contrast civilizations of the past.
 - Understands how economic, political and environmental factors influenced the development of early civilizations (i.e. Mesopotamia, Egypt, The Mayans, etc...)
 - Understands the ancient writing forms of various civilizations (i.e. Mesopotamia, Egypt, Mayans, etc...)
 - Understands the social, religious, and political structures of early civilizations.
 - Understands characteristics of Mycenaean Greek civilization and culture
 - Understands how the development of technology affected early civilizations.

5.3-6.3 Analyzing and interpreting historical information.

- Decide how literature, such as legends and tall tales has contributed to our national heritage.
- Assemble and interpret facts from the Constitution by using a variety of sources (i.e. book, video, and computer)
- Interpret symbols that have national meaning and identify the meaning of the symbol.
- Understand that the Constitution describes people's rights and establishes the three branches of the federal government.
- Understands what archaeological, artistic, and written sources can illustrate about early civilizations.

Westwood Community Schools Standards and Benchmarks (Grades 7-8)

Standard 1- Behavioral Studies: The students will be able to understand the diversity of social groups and their development.

- 1.7-8.1 Understand the role of language, customs, and traditions in cultures.
 - Analyze how culture and society influenced world history.
 - *Examine the role of religion in societies.*
 - Examine the cultural influences in the United States.
- 1.7-8.2 Understand the importance of valuing cultures different from one's own.
 - Identify how global connections (historical, cultural, geographic, technological, ethical and societal issues) influence societies.
 - Discuss the development of different American cultural groups.
 - *Examine the history and cultural heritage of people around the world.*
- 1.7-8.3 Understand the characteristics of individual and group behavior and interaction.
 - *Explain how culture and society influence individual and group identity.*
 - Describe the conflict of Native Americans and westward moving settlers in the U.S.

Standard 2- Civics: The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

- 2.7-8.1 Understand the structures and purposes of governments
 - Analyze how the basic rights and responsibilities of individuals and the needs of society have been influenced by systems of authority and governance.
 - Compare and contrast government systems in the world.
 - List the rights English colonists brought to America.
 - Explain why Britain tightened control over the colonies.
 - Describe the system of government established by the Constitution.
- 2.7-8.2 Know the responsibilities of citizenship and the components of civic participation.
 - *Identify the benefits and challenges of the rights of citizenship.*
 - *Explain why political disagreements developed between England and its colonies.*
 - Trace the events that led to open rebellion against the British.
 - *Trace the creation of the Constitution.*

- 2.7-8.3 Analyze the relationship of democratic governments to other forms of governments.
 - Identify how governmental systems are interdependent and interact with each other.
 - Compare the U.S. government to other governments found around the world.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

- 3.7-8.1 Understand the principles governing economic decision making.
 - Analyze how major economic forces and institutions influence individual decisions of producers, consumers, and investors.
 - Identify economic activities in the United States.
- 3.7-8.3 Know the structure of the global economic systems.
 - Analyze the positive and negative aspects of the various economic systems.
 - Evaluate how economic forces and factors shape a give culture and/or society
- 3.7-8.3 Understand how interdependence affects the global marketplace.
 - Identify the impact of production, distribution and consumption of goods and services on countries in the world.
 - Describe the countries of the world economic resources, activities, and challenges.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

- 4.7-8.1 Understand the interactions of geography and the physical and human environment.
 - Examine the relationship between geographic elements and concepts in history, government, and economics.
 - Analyze the characteristics, distribution, and migration of human populations on the Earth's surface.
 - Identify the five themes of geography and its role in studying geography.
 - Describe how regional differences developed in the United States.
 - Examine the impact of geography on historical events.

4.7-8.2 Know the characteristics and purposes of geographic tools.

- Interpret maps, graphs, charts, tables, diagrams, photographs, atlas, and film.
- Identify geographic skills and processes needed to interact in the world community.
- Identify and apply terms in geography.

4.7-8.3 Analyze the land, climate, and resources of various regions.

- Locate physical and cultural features of local, community, state, nation, and world.
- Identify geographical and political boundaries of the world.
- Analyze how climate affects the different regions of the world and their lifestyles.
- Compare geographical similarities and differences among regions of the world.

Standard 5- History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

- 5.7-8.1 Understand how key events, people, and ideas contributed to Iowa history.
 - Identify local changes in physical and cultural features.
 - Identify key people in Iowa's history and present.
 - Examine Iowa's governmental history and structure.
 - Analyze Iowa's path to statehood.
 - Describe Iowa's economy and major resources.
 - *Recognize the major animal groups of Iowa.*
 - Understand the major celebrations and events that take place in *Iowa annually.*
- 5.7-8.2 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.
 - Describe how the first Americans developed ways of life.
 - Explain why Europeans search for sea routes to Asia.
 - Trace the American victory in the Revolution War.
 - Trace the history and result of the Louisiana Purchase.
 - Analyze the development of Antislavery Movement in America.
 - Examine the acquisition of several territories in the expansion of the United States in the 1800s.
 - Describe the events that lead to the U.S. Civil War.
 - Trace the major events of the U.S. Civil War.
- 5.7-8.3 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Explain how Columbus's voyages led to further European exploration of the Americans.
- List the reasons why the Spanish started settlements in North America.
- Explain why other European nations began to challenge Spain's power.
- Explain the reasons why people chose to settle in the English colonies in the 1600s.
- List important inventions of the early 1800s.
- Describe the effects of the U.S. Civil War on Americans.
- *Explain how the U.S. was affected by Reconstruction.*

5.7-8.4 Analyzing and interpreting historical information.

- Explain the success of Jamestown and Plymouth
- Compare the way of life in the New England, Southern, and Middle colonies.
- Examine reasons for the colonies to declare independence.
- Explain why slavery divided the North and South.

(Grades 9-12)

Standard 1- Behavioral Studies - The students will be able to understand the diversity of social groups and their development.

- 1.9-12.1 Understand the role of language, customs, and traditions in cultures.
 - Describe the impact of immigration on the United States.
 - Examines the value of cultural diversity within and across groups.
 - Identify individual cultural traits throughout different societies.
- 1.9-12.2 Understand the importance of valuing cultures different from one's own.
 - Identify the impact of culture as it relates to U.S. history.
 - *Examine, interpret, and analyze cultural diversity among groups of people.*
- 1.9-12.3 Understand the characteristics of individual and group behavior and interaction.
 - *Explain how culture and society influence individual and group identity.*
 - Describe and compare how people create places that reflect culture, human needs, government policy, and current values.
 - Demonstrate an awareness of the tolerant and intolerant behaviors of groups and individuals throughout history.

• Analyze and explain the ways groups, societies, and cultures address human needs and concerns.

Standard 2- Civics - The students will be able to develop and understand the different forms and structures of government and the responsibilities involved in citizenship.

- 2.9-12.1 Understand the structures and purposes of governments.
 - Explain how people, places, and environment influence government/political systems.
 - *Explain and describe how basic theories of government were created.*
 - Describe the basic development and principles of the U.S. Constitution.
 - Describe how political parties were created and their effect on today's society.
- 2.9-12.2 Know the responsibilities of citizenship and the components of civic participation.
 - Examine the benefits and challenges of the rights of citizenship and how it played a role in U.S. history.
 - Provide examples of how the relationships between basic rights and responsibilities of individuals and the needs of society are affected by authority and governance.
- 2.9-12.3 Analyze the relationship of democratic governments to other forms of governments.
 - Identify how governmental systems are interdependent and interact with each other.
 - Compare and contrast different world governments to the U.S. government.

Standard 3- Economics: The students will be able to understand the basic features of economic systems and the principles that govern them.

- 3.9-12.1 Understand the principles governing economic decision making.
 - Compare and contrast the world economic systems and their impact on world trade.
 - *Examine the laws of supply and demand.*
 - Analyze how the economy can shape world leaders, politics, and decision making.
- 3.9-12.2 Know the structure of the global economic systems.
 - Evaluate how economic forces and factors shape a given culture and/or society.
 - *Identify how science and technology has impacted United States history.*

- Provide examples of how economic forces and factors shape a given culture and/or society.
- 3.9-12.3 Understand how interdependence affects the global marketplace.
 - Identify the impact of production, distribution and consumption of goods and services on United States history.
 - Determine how governmental systems and economic systems are interdependent and interact with each other.

Standard 4- Geography: The students will be able to understand the world's physical and cultural features.

- 4.9-12.1 Understand the interactions of geography and the physical and human environment.
 - *Examine the relationship between geographic elements and concepts in history, government, and economics.*
 - *Examine how people, places, and environment influenced United States history.*
 - Describe the impact of climate on global economic systems.

4.9-12.2 Know the characteristics and purposes of geographic tools.

- Interpret maps, graphs, charts, tables, diagrams, photographs, atlas, and film.
- Create, interpret, use, and synthesize information from various representations of the earth, such as maps, globes, and photographs.
- 4.9-12.3 Analyze the land, climate, and resources of various regions.
 - Compare and evaluate alternative policies for the use of land and other resources in communities, regions, nations, and the world.
 - Define climate and describe how it affects people in different places.

Standard 5-History: The students will be able to understand the way time, continuity, and change affect human beings in and overtime.

- 5.9-12.1 Understand the role of and use chronological order, sequences, and relationships to describe historical events and periods of history.
 - Apply chronological thinking to describe and investigate historical events and time periods.
 - Analyze and evaluate conditions, actions, and motivations that contribute to conflicts and cooperation within the United States and among other nations.
 - Demonstrate understanding of cause and effects relationship of major U.S. wars.
 - Evaluate the role of the U.S. being a world power, our influence, and responsibilities in the world.

5.9-12.2 Understand how key events, people, and ideas contributed to U.S. History and World History.

- Identify how global connections (historical, cultural, geographic, technological, and societal issues) influenced U.S. History.
- Identify the impact of culture as it relates to U.S. History.
- Assess, analyze, and identify key leaders in the U.S. and the impact they had in U.S. History.
- Assess the impact of the Civil Rights Movement in American History.

5.9-12.3 Analyzing and interpreting historical information.

- Analyze, interpret, and evaluate information related to American History using primary sources.
- *Examine the factors that contribute to different interpretations of the same historical event.*
- Analyze and interpret historical documents throughout history.

American History

Standard 1	Behavioral Studies			
1.1	Understands the early arrival of Europeans and Africans in America and			
	how these people interacted with Native Americans. TMT, Disc.			
1.2	Describes the sources of conflict between Europeans and Native			
	Americans. TMT, Disc.			

 Locates and describes significant historical periods and patterns of change within and across cultures that provoke social, economic, and political revolutions. TMT, Disc.

Standard 2 2.1 Examines and labels issues of individual rights that are persistent throughout United States history. TMT, Disc. 2.2 Identify and analyze the changes of governmental procedures and governmental processes in the United States. TMT, Disc. 2.3 Identifies, analyzes, interprets, and evaluates sources and examples of citizens' rights and responsibilities. Disc

Standard 3 Economics

3.1 Analyze basic economic systems according to rules and procedures with demand, supply, prices, the role of government, banks, labor and labor unions, saving and investments, and capital. TMT, Disc.

3.2 Identify and describe various results of the Colombian exchange. TMT,

Disc.

3.3 Recognize economic ties that can influence government, culture, and

society. TMT, Disc.

Standard 4 Geography

4.1 Describes and evaluates ways that historical events have been influences by physical and human geographic factors. TMT, Disc.

4.2 Summarize and recall the period of American Expansionism. TMT

Standard 5 U.S. History

5.1 Analyze, examine, and evaluate the pre-Civil War, Civil War, and reconstruction events and issues. TMT

- 5.2 Compares and analyzes the way the United States responds to conflicts and wars between forces of unity and forces of diversity. TMT, Prod, Disc.
 5.3 Identifies, analyzes, and assesses key leaders in the United States
 - throughout its beginnings. TMT, Prod, Disc.
- Standard 6 World History

6.1 Compares and contrasts the English methods of colonization with that of the Spanish method. TMT, Disc.

6.2 Analyzes and evaluates conditions, actions, and motivations that

contribute to conflicts and cooperation within the United States and among

other nations.

Westwood Community School Benchmarks American History

Standard 1	Behavioral Studies				
1.1	Understands the early arrival of Europeans and Africans in America and				
	how these people interacted with Native Americans. TMT, Disc.				
1.2	Describes the sources of conflict between Europeans and Native				
	Americans. TMT, Disc.				
1.3	Locates and describes significant historical periods and patterns of change				
	within and across cultures that provoke social, economic, and political				
	revolutions. TMT, Disc.				

Standard 2 2.1	Civics Examines and labels issues of individual rights that are persistent		
	throughout United States history. TMT, Disc.		
2.2	Identify and analyze the changes of governmental procedures and		
	governmental processes in the United States. TMT, Disc.		
2.3	Identifies, analyzes, interprets, and evaluates sources and examples of		
	citizens' rights and responsibilities. Disc		

Standard 3 Economics

3.1 Analyze basic economic systems according to rules and procedures with demand, supply, prices, the role of government, banks, labor and labor unions, saving and investments, and capital. TMT, Disc.

3.2	Identify and de	escribe various	results of the	Colombian exchange	. TMT,

Disc.

3.3 Recognize economic ties that can influence government, culture, and

society. TMT, Disc.

Standard 4 Geography

4.1 Describes and evaluates ways that historical events have been influences by physical and human geographic factors. TMT, Disc.

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6.2 Analyzes and evaluates conditions, actions, and motivations that

contribute to conflicts and cooperation within the United States and among

other nations.

Technology Standards and Benchmarks

Technology Standards

- Knows the characteristics and uses of computer hardware and operating systems
- Knows the characteristics and uses of computer software programs
- Understands he relationships among science, technology, society, and the individual
- Understands the nature of technological design
- Understands the nature and operation of systems
- Understands the nature and uses of different forms of technology

Standard 1: Knows the characterisitic and uses of computer hardware and operating systems

Benchmarks 1 (level I)

- Knows basic computer hardware (e.g. keyboard and mouse, printer, monitor output, hard and floppy disk, case for the CPU [central processing unit])
- Powers-up computer, monitor, and starts a computer program (e.g. checks that printer is switched on and on-line, reboots the computer when necessary
- Knows the alphanumeric keys and special keys (e.g., function keys, escape key, space bar, delete/backspace, return/enter)
- Knows proper finger placement on the home row keys
- Handles diskettes and other computer equipment with care

Benchmarks 1 (level II)

- Knows the basic functions of hardware (e.g., keyboard and mouse provide input; printer and monitor provide output; hard and floppy disk provide storage; the cpu processes information)
- Uses proper fingering for all keys, beginning from the homerow, maintaining proper posture while using the keyboard
- Know potential hazards to computer media (e.g., the damage fields, dirt, and dust; caused to computers by excessive heat, smoke and moisture)

• Knows basic facts about networked computers (e.g., computers can connect to each other via modem and telephone lines, or through local network systems, or internet and intranet)

Benchmark 1 (level III)

- Knows the differing capacities and trade-offs for computer storage media, such as CD-ROMs, floppy disks, hard disks, and tape drives
- Types with some facility, demonstrating some memorization of keys
- Connects via modem to the computer users via the internet, an on-line service, or bulletin board system
- Knows basic characteristics and functions of an operating system

Benchmark 1 (level IV, Grades 9-12)

- Knows of significant advances in computers and peripherals (e.g. data scanners, digital cameras)
- Uses a variety of input devices (e.g., keyboard, scanner, voice/sound recorders, mouse, touch screen)
- Knows limitations and trade-offs of various types of hardware (e.g. laptops notebooks, modems)
- Identifies malfunctions an problems in hardware (e.g., hard drive crash, monitor burn-out)
- Knows features and uses of current and emerging technology related to computing (e.g., optical character recognition, sound processing, cable TV, cellular phones, ABS brakes)

Standard 2: Knows the characteristics and uses of computer software programs

Benchmark 2 (level I)

- Types on a computer keyboard, using correct hand and body positions
- Knows basic distinctions among computer software programs, such as word processors, special processors, special purpose programs, and games
- Uses menu options and commands

Benchmark 2 (level II)

- Uses a word processor to edit, copy, move, save, and print text with some formatting (e.g, centering lines, using tabs, forming paragraphs)
- Makes back-up copies of stored data, such as text, programs, and databases

- Trouble-shoots simple problems in software (e.g., re-boots, uses help systems)
- Knows the common features and uses of databases (e.g., databases contain records of similar data, which is sorted or organized for ease of use; databases are used in both print form, such as telephone books, and electronic form, such as computerized card catalogs)
- Uses database software to add, edit and delete records, and to find information through simple sort or search techniques
- Knows how formats differ among software applications (e.g., word processing files, database files) and hardware platforms (e.g., Macintosh, Windows)

Benchmark 2 (level III)

- Uses advanced features and utilities of word processors (e.g., uses clip art, a spell-checker, grammar checker, thesaurus, outliner)
- Knows the common features and uses of desktop publishing software (e.g., documents are created, designed, and formatted for publication; data, graphics, and scanned images can be imported into a document using desktop software)
- Knows the common features and uses of spreadsheets (e.g., data is entered in cells indentified by row and column; formulas can be used to update solutions automatically; spreadsheets are used in print form, such as look-up tables, and electronic form, such as to track business profit and loss)
- Uses a spreadsheet to update, add, and delete data, and to write and execute valid formulas on data
- Uses Boolean searches to execute complex searches on a data base

Benchmark 2 (level IV, Grades 9-12)

- Understands the uses of list servs, user net newsreaders, and bulletin board systems
- Knows how to import, export, and merge data, and graphics between software programs
- Identifies some advanced features of software products (e.g., galleries, templates, macros, mall merge)
- Uses desktop publishing software to create a variety of publications

Standard 3: Understands the relationships among science, technology, society, and the individual

Benchmark 3 (level I)

- Knows ways that technology is used at home and at school (e.g., paging systems, telephones, VCRs)
- Knows the new tools and ways of doing things affect all aspects of life, and may have positive or negative effects on other people
- Understands that when an individual creates something on a computer, the created work is that person's property, and only that person has the right to change it

• Knows that man-made materials, products, and systems can affect the environment adversely, yet there are things that can be done to circumvent this process (e.g., disposing of waste properly, reusing old objects and new designs)

Benchmark 3 (level II)

- Knows that technologies often have costs as well as benefits and can have an enormous effect on people and other living things
- Knows areas in which technology has improved human lives (e.g., transportation, communication, nutrition, sanitation, health care, entertainment)
- Knows that new inventions often lead to other new inventories and ways of doing things
- Knows that new inventions reflect people's needs and wants and when these change, technology changes to reflect the new needs and wants
- Understands the concept of software piracy (i.e., illegally copying software), and that piracy is a violation of copyright laws
- Understand that technology may affect the environment both negatively and positively (e.g., a mass transit system may both reduce the number of cars in an area, but also cause harm to wildlife in the area)

Benchmark 3 (level III)

- Knows the scientific inquiry and technological design have similarities and differences (e.g., scientists propose explanations for questions about the natural world that are always tentative and evolving, and engineers propose solutions relating to human problems, needs, and aspirations; both science and technology depend on accurate scientific information and they cannot contravene scientific laws)
- Knows the science cannot answer all questions and technology cannot solve all human problems or meet all human needs
- Knows ways in which technology has influenced the course of history (e.g., revolutions in agriculture, manufacturing, sanitation, medicine, warfare, transportation, information, processing, communication)
- Knows that technology and science have a reciprocal relationship (e.g., technology drives science, as it provides the means to access outer space and remote locations, collect and treat samples, collect, measure, store, and computer data, compute data, and communicate information, science drives technology, as it provides principles for better instrumentation and techniques, and the means to address questions that demand more sophisticated instruments)
- Knows ways in which technology and society influence one another (e.g., new products and processes for society and developed through technology; technological changes are often accompanied by social, political and economic changes; technology is influenced by social needs, attitudes, values and limitations, and cultural backgrounds and beliefs)
- Knows examples of copyright violations and computer fraud (e.g., computer hacking, computer piracy, intentional virus setting, invasion of privacy) and possible penalties (e.g., large fines, jail sentences)

• Knows ways technology is used to protect the environment and prevent damage caused by nature (e.g., new building technologies protect cities from earthquakes, bacteria are used in cleaning water)

Benchmark 3 (level IV)

- Knows that science and technology are pursued for different purposes (e.g., scientific inquiry is driven by the desire to understand the natural world and seeks to answer questions that may or may not directly influence humans; technology is driven by the need to meet human needs an solve human problems)
- Knows ways in which social and economic force influence which technologies will be developed and used (e.g., cultural and personal values, consumer acceptance, patent laws, availability or risk capital, the federal budget, local and national regulations, media attention, economic competition, tax incentives)
- Knows that alternatives, risks, costs and benefits must be considered when deciding on proposal to introduce new technologies or to curtall existing ones (e.g., Are there alternative ways to achieve the same ends? Who benefits and who suffers? What are the financial potential and social costs and who bears them? How serious are the risk and who is in jeopardy? What resources will be needed and where will they come from?)
- Knows that technological knowledge is often not made public because of patents and the financial potential of the idea or invention; scientific knowledge is made public through presentation at professional meetings and publications in scientific journals
- Knows examples of advanced and emerging technologies (e.g., virtual environment, personal digital assistants, voice recognition software) and how they could impact society
- Observes common courtesies and acceptable use policies while telecomputing
- Knows that mathematics, creativity, logic and originality are all needed to improve technology
- Knows the role of technology in a variety of careers
- Knows that the rate of technological development and diffusion is increasing rapidly, even though individual technologies may be developed at a slow pave due to technical difficulties or consumer resistance
- Knows that technology can benefit the environment by providing scientific information, providing new solutions to older problems, and reducing the negative consequences of existing technology (e.g., monitoring a habitat or measuring greenhouse gases, improving renewable energy sources, and creating scrubbers to improve coal-burning facilities)

Westwood Community Schools Standards and Benchmarks **Standard 4:** Understands the nature of technological design

Benchmark 4 (level I)

- Knows that both objects and systems occur in nature (e.g., stars and the solar system), but people can also design and make objects and systems (e.g., telephones and communication systems) to solve a problem and to improve the quality of life
- Knows that tools have specific functions, such as to observe, measure, make things, and do things better or more easily; selecting the right tool makes the task easier
- Knows that people are always inventing new ways to solve problems and accomplish work (e.g., a computer is a machine that helps people work and play)
- Knows that planning is a an important part of the design process
- Knows that new objects can be created out of physical materials (e.g., paper, cloth)
- Knows that because there may be multiple solutions to a design problem, each appropriate to different situations, many creative ideas can be useful

Benchmark 4 (level II)

- Categorizes items into groups of natural objects and designed objects
- Knows that group collaboration is useful as the combination of multiple creative minds can yield more possible design solutions
- Knows that the design process is a series of methodical steps for turning ideas into useful products and systems
- Identifies a simple problem that can be solved using technology
- Knows constraints that must be considered when designing a solution to a problem (e.g., cost, materials, time space, safety, scientific laws, engineering principles, construction
- Uses appropriate tools, techniques, and quantitative measurements to implement proposed solutions
- Evaluates a product or design (e.g., considers how well the product or design met the challenge to solve a problem; considers the ability of the product or design to meet constraints), and makes modifications based on results
- Knows that people have invented and used tools throughout history to solve problems and improve ways of doing things
- Knows that different technologies can often be combined (e.g., an escalator used both pulleys and an electric motor)

Benchmark 4 (level III)

- Knows that the design process is a slow, methodical process of test and refinement
- Knows that the design process relies on different strategies: creative brainstorming to establish many design solutions, evaluating the feasibility of various solutions in order to choose a design, and troubleshooting the selected design

- Identifies appropriate problems which can be solved using technological design (e.g., identifies a specific need, considers its various aspects, considers criteria for a suitable product)
- Designs a solution or product, taking into account needs and constraints (e.g., cost, time tradeoffs, properties of materials, safety, aesthetics)
- Implements a proposed design (e.g., organizes materials and other resources, plans one's work, makes use of group collaboration when appropriate, chooses suitable tools and techniques, works with appropriate measurement methods to ensure accuracy)
- Evaluates the ability of a technological design to meet criteria established in the original purpose (e.g., considers factors that might affect acceptability and suitability for intended users or beneficiaries; develop measures of quality with respect to these factors), suggests improvements, and tries proposed modifications
- Understands that nonphysical objects (e.g., software) and physical objects (e.g., a telephone) are both subject to the design process
- Knows that invention is the process of creating a new system or object out of an idea while innovation is the process of modifying an existing system or object to improve it (e.g., the specialization of function of the subsystem)

Benchmark 4 (level IV, Grades 9-12)

- Knows that an optimal solution to a design problem is more likely to be found when the process followed is systematic and repetitive
- Proposes designs and uses models, simulations, and other tests to choose an optimal solution
- Implements a proposed solution (e.g., constructs artifacts for intended users or beneficiaries)
- Evaluates a designed solution

Standard 5: Understands the nature and operation of systems

Benchmark 5 (level I)

- Knows that most things are made of parts and they may not work if some parts are missing
- Knows that when parts are put together, they can do things that they couldn't do by themselves
- Understands how some elements of simple systems work together (e.g., people in a restaurant, parts of a bicycle)
- Creates and tests a simple linear system (e.g., a production line process for making sandwiches)

Benchmark 5 (level II)

- Knows that when things are made up of many parts, the party usually affect one another
- Knows that things that are made of parts may not work well if a part is missing, broken, worn out, mismatched, or misconnected

- Understands the relationships between elements (i.e., components, such as people or parts) in systems
- Assembles, disassembles, and tests systems (e.g., in logo programming, using paper and pencil designs)

Benchmark 5 (level III)

- Knows that a system can include processes as well as components
- Knows how part of a system can provide feedback when its output (in the form of material, energy, or information) becomes input of another part of the system
- Identifies the elements, structure, sequence, operation and control of systems
- Assembles and disassembles systems to manage, control and improve their performances (e.g., a computer program, a simple machine based on a pulley mechanism)
- Knows that systems are usually linked to other systems, both internally and externally, and can contain subsystems as well as operate as subsystems
- Knows that an open-loop system (e.g., a microwave as a heating system) has no feedback and requires human intervention, where a closed-loop system with a thermostat) uses feedback

Benchmark 5 (level IV, Grades 9-12)

- Knows that a system usually has some properties that are different from those of its parts, but appear because of the interaction of those parts
- Knows that understanding how things work and designing solutions to problems of almost any kind can be facilitated by systems thinking, which employs mathematical modeling and simulation
- Knows that in defining a system, it is important to specify its boundaries and subsystems, indicate its relation to other systems, and identify what its input and its output are expected to be
- Knows how feedback can be used to help monitor, control, and stabilize the operation of a system
- Knows that complex systems are subject to failure and are designed with various elements and testing and overdesign, redundancy, more controls) that help reduce system failure
- Constructs and operates systems (e.g., organizes and adjusts subsystems)
- Knows that systems are embedded within larger systems, including technological , social, and environmental systems

Standard 6: Understands the nature and uses of different forms of technology

Benchmark 6 (level I)

• Knows that technology is used in medicine to prevent and cure disease (e.g., through vaccinations and medications)

- Knows that technology is used to improve what humans get from crops by reducing the amount of work needed, keeping food fresh, and moving it long distance to where people need it
- Knows that energy comes from different sources (e.g., electricity, gas, water) and is used in many common objects (e.g., a stove, some toys)
- Knows that communication technology allows people to exchange and find information quickly, cheaply, and reliably over a distance
- Knows that a transportation system is tailored to a society's needs and consists of rules (e.g., which side of the road to drive on) and components (e.g., vehicles and the surface upon which they move)
- Knows that manufacturing technology first creates a complete and detailed design of a product and then produces this product in quantity
- Knows that there are different types of structures (e.g., house, airport, highway) and each one requires different materials and parts

Benchmark 6 (level II)

- Knows that medical technology is used to provide information about a patient's body (e.g., measuring blood glucose levels) and to repair, replace, and support parts of the body
- Knows that elements of an agricultural system are designed to maximize the interaction and production of all the elements in the system (e.g., by composting, using plants for food, oxygen, and water and air filtration)
- Knows that different types of energy (e.g., solar, fossil fuels) have different advantages and disadvantages (e.g., solar energy is a cleaner source of energy than fossil fuels, but currently is more expensive), and that regardless of the source of energy, the technological design should attempt to maximize the use of it
- Knows that technology facilitates better communication by providing storage and retrieval of large amounts of data, an easy means of accessing data, a means of processing and displaying data, and faster communication among individuals
- Knows that transportation systems affect society (e.g., where people live) and are affected by society and nature (e.g., activist may request more public transit, a severe thunderstorm may cause flights to be canceled)
- Knows that manufacturing processes include designing the product, gathering natural and/or synthetic resources, and final production
- Knows that construction technology requires building materials, specialized tools and machines, money, time, energy, land, and human work and that the final structures are subject to local building codes

Benchmark 6 (level III)

• Understands ways in which medical technology improves the quality of health care (e.g., advanced diagnosing equipment, increased hospital sanitation)

- Knows ways in which biotechnological results in benefits for humans, including more convenience, less labor, improved health and medicine, and improved food
- Knows that most technological systems require an input of energy, which is an important consideration both in designing an object or a system and in conserving energy (e.g., that alternative sources to fossil fuels should be used when possible)
- Knows that components of a communication system (i.e., a source, encoder, transmitter, receiver, decoder, and destination)
- Knows that individual transportation vehicles contain several subsystems (e.g., structural, propulsion, control)
- Knows that manufacturing processes use hand tools, human-operated machines, and automated machines to separate, form, combine, and condition natural and synthetic materials; these changes may either be physical or chemical
- Knows that construction design is influenced by factors such as building laws and codes, style, convenience, cost climate, and function

Benchmark 6 (level IV, Grade 9-12)

- Knows that genetic engineering is the process by which controlled changes in a genetic structure can be made and that this process is used to research and diagnose disease and create pharmaceuticals
- Knows that biotechnology is used in a variety of areas (e.g., agriculture, pharmaceuticals, food and beverage, fuels and energy, the environment, genetic engineering) and requires specific scientific
- Understands scientific principles of energy, work and power in relation to technological design (e.g., the Second Law of Thermodynamics means that a system cannot be designed which is 100% efficient)
- Knows that power systems (i.e., systems which convert energy from one form to another) have a source of energy, a process, loads, and some have a feedback system
- Knows that communication systems can transfer information from person to person (e.g., a telephone), person to machine (e.g., a person inputting information into a computer), or machine to machine (e.g., an automated payroll system where the record of the money goes from know computer to another)
- Knows that modern transportation systems are diverse (allowing humans to combine types of transportation for the most direct and convenient route), intelligent (requiring coordinated subsystems, such as a traffic light system), and are necessary in the functioning of most other technologies
- Knows that there are different types of manufacturing systems (customized, batch, and continuous production) and manufacturing results in two different types of goods, durable and non-durable