

NORTHERN VALLEY SCHOOLS CONSORTIUM

Closter, Demarest, Harrington Park,
Haworth, Northvale, Norwood,
Old Tappan, and the
Northern Valley Regional High School District

CURRICULUM OBJECTIVES: GRADE FOUR

COMPREHENSIVE HEALTH

LANGUAGE ARTS

MATHEMATICS

MUSIC

PHYSICAL EDUCATION

SCIENCE

SOCIAL STUDIES

TECHNOLOGY

VISUAL ARTS

WORLD LANGUAGES

2016 - 2017

NORTHERN VALLEY SCHOOLS CONSORTIUM

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COMPREHENSIVE HEALTH

WELLNESS

All students will acquire health promotion concepts. Students will be able to:

- Analyze the importance of health choices and behavior on wellness.
- Describe the structure and function of human body systems. (See Science Curriculum Guide for specifications)
- Analyze factors that contribute to healthy, social, emotional, and intellectual growth and uniqueness.
- Classify foods by food group, food source, nutritional content, and nutritional value.
- Interpret food product labels.
- Describe the importance of the early detection of diseases and health conditions.
- Discuss how a balanced diet provides energy, lowers the risk of disease, helps to maintain a healthy weight, and supports overall wellness.
- Investigate how the use of universal precautions, sanitation and waste disposal, proper food handling and storage, and environmental controls help to prevent diseases and health conditions.
- Discuss ways to maintain and improve mental health .
- Describe the importance of personal actions to prevent the spreading of disease (covering coughs, hand washing, etc.)
- Compare and contrast the characteristics of safe and unsafe situations and develop strategies to reduce the risk of injuries at home, school, the Internet and the community.
- Describe and demonstrate simple first aid procedures, including the assessment of choking and breathing, the control of bleeding, and the care of minor wounds and burns.
- Explain that abuse can take several forms, including verbal, emotional, sexual, and physical, and identify ways to get help should abuse be suspect.
- Discuss how culture, peers, and the media impact the way individuals communicate and express emotions, and how emotions can affect communications, choices and behaviors.
- Distinguish among conflict, violence, vandalism, harassment, and bullying and discuss factors that contribute to each.
- Act out strategies to prevent, reduce, or mediate conflict.
- Analyze the causes of stress and demonstrate ways to deal with stressful situations.
- Explain and demonstrate ways to cope with rejection, loss, and separation.

INTEGRATED SKILLS

All students will Develop and use personal and interpersonal skills to support a healthy, active lifestyle. Students will be able to:

- Discuss health information with peers.
- Explain how to use the decision making process to make healthy choices.
- Use effective communication skills when responding to conflict.
- Develop a personal health goal and track progress.
- Describe ways to support the achievement of health goals.
- Understand when health related decisions can be made personally or with the help of others.
- Describe how family, peers, community, media and culture impact thinking related to health and wellness.
- Discuss character traits and core ethical values such as trustworthiness, responsibility, respect, caring, empathy, attitude, fairness, and good citizenship.
- Discuss laws and regulations created to enhance wellness.
- Participate in a school or community services activity and discuss how helping others impacts personal and community wellness.
- List health services and resources available in the community.
- Understand when to get help for a health concern.

DRUGS AND MEDICINE

All students will acquire knowledge about alcohol, tobacco, other drugs and medicines and apply these concepts to support a healthy, active lifestyle. Students will be able to:

- Distinguish between over-the-counter and prescription medicines.
- Identify commonly used medicines and discuss why they are used.
- Discuss the importance of taking medicines as ordered, not sharing medicines with others, and reporting any side effects to a trusted adult.
- Explain why it is illegal to use or possess certain drugs/substances.
- Explain that brain damage, lung damage, and death can occur from inhaling certain substances, such as solvents, propellants, and medicinal gases.
- Compare long and short term effects of tobacco and alcohol.
- Discuss signs that a person might have a problem with the use of alcohol, tobacco, and other drugs.
- Identify where individuals with a substance abuse problem can get help.
- Differentiate among drug use, abuse, and misuse.
- Describe how advertising, peers, and adults influence children and teenagers to try alcohol, tobacco, and other drugs.

HUMAN RELATIONSHIPS AND SEXUALITY

All students will acquire knowledge about physical, social, and emotional aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle. Students will be able to:

- Compare and contrast different kinds of families and discuss how families can share love, values and traditions, provide emotional support, and set boundaries and limits.
- Evaluate ways that families adjust to changes in the nature or structure of the family.
- Evaluate how culture and tradition influence personal and family development.
- Describe the physical, social, and emotional changes occurring at puberty.
- Discuss why puberty begins and ends at different ages for different people.
- Explain that after fertilization, cells divide to create a fetus/embryo that grows and develops inside the uterus during pregnancy.
- Explain how a mother's health directly impacts the development of a fetus.



LANGUAGE ARTS

Literature

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.



Reading Foundational Skills

Print Concepts

1. Demonstrate understanding of the organization and basic features of print by examining examples of narrative and expository texts.
 - Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).
 - Recognize the distinguishing features of literature (e.g. chapters, genres)
 - Recognize the distinguishing features of informational text (e.g. headings, captions, diagrams, etc.)
2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes) as taught in grades K-1.
 - Demonstrate a sophisticated sense of sound-symbol relationships, including all phonemes (e.g., blends, digraphs, diphthongs).

*See Suggested Resources.

Phonics and Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - Identify and know the meaning of the most common prefixes and derivational suffixes.
 - Decode words with common Latin suffixes.
 - Decode multi-syllable words in context and out of context.
 - Read grade-appropriate irregularly spelled words.
 - Identify the two words from which the compound word was formed.
 - Identify the two words from which each contraction was formed.
 - Identify appropriate grade level sight word vocabulary.
 - Point to and clearly identify specific words or wording that cause comprehension difficulties.
 - Endings: - recognize the meaning of word endings: s, en, er, est, 's, s', es, ing, ed.
 - Identify syllabication patterns.

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - Read on-level text with purpose and understanding.
 - Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
 - Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading & Informational Text

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
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Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

Writing

Text Types and Purposes

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Text Types and Purposes

3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, drafting, revising, editing, rewriting, or trying a new approach.

Production and Distribution of Writing

6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Speaking and Listening

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Language

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.



MATHEMATICS

Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.
2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted.

Gain familiarity with factors and multiples.

4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Generate and analyze patterns.

5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself

Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
3. Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.

4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.
5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Number and Operations—Fractions

Extend understanding of fraction equivalence and ordering.

1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

3. Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.
 - a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
 - b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.
 - c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
 - d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
 - a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$.
 - b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number.
 - c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

Understand decimal notation for fractions, and compare decimal fractions.

5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.
6. Use decimal notation for fractions with denominators 10 or 100.
7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Measurement and Data

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

Represent and interpret data.

4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

Geometric measurement: understand concepts of angle and measure angles.

5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:
 - a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.
 - b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.



MUSIC

General Music

Performance

- A. Perform works of art that have a utilitarian purpose, including improvisation.
- B. Perform works of art that places an emphasis on structural arrangement.
- C. Demonstrate how the elements of music are used to achieve balance in composition.
- D. Demonstrate musical elements in response to aural prompts and printed scores.
- E. Sing independently and in groups in one or more parts.

Reading and Notation

- A. Read music from progressively complex notation, including mixed meters, compound meters, and the grand staff.
- B. Demonstrate knowledge of basic concepts of music.

Listening and Responding

- A. Employ basic, discipline-specific arts terminology to categorize works of dance, music, according to established classifications
- B. Make informed aesthetic responses to artworks based on structural arrangement and personal, cultural, and historical points of view
- C. Demonstrate how art communicates ideas about personal and social values and is inspired by an individual's imagination and frame of reference.

Critiquing

- A. Identify criteria for evaluating performances.
- B. Use evaluative tools for self-assessment.
- C. Use appropriate music terminology to express fact and opinion regarding a work of music.
- D. Define technical proficiency and analyze how artists apply the elements.
- E. Performance
- F. Consider the context for the creation and of the work when assessing works of dance, music, theatre and visual art. What is the purpose, who is the intended audience?

History and Culture

- A. Recognize works of dance, music, theatre, and visual arts as a reflection of societal values and beliefs.
- B. Relate common artistic elements that define distinctive genres in music.
- C. Determine the impact of significant contributions of individual artists from diverse cultures throughout history.

Connections

- A. Make connections between music and real life experiences.

Grade 4 Instrumental Music

Performance

- A. Perform works of art that have a utilitarian purpose, including improvisation.
- B. Perform works of art that places an emphasis on structural arrangement.
- C. Demonstrate how the elements of music are used to achieve balance in composition.
- D. Demonstrate musical elements in response to aural prompts and printed scores.

Reading and Notation

- A. Read music from progressively complex notation, including mixed meters, compound meters, and the grand staff.
- B. Demonstrate knowledge of basic concepts of music.

Listening and Responding

- A. Incorporate personal life experience into an aesthetic response about an artwork.
- B. Communicate ideas about the social and personal value of music.

Critiquing

- A. Use appropriate music terminology to express fact and opinion regarding a work of music.
- B. Critique performances based on the elements of music and technical proficiency.
- C. Identify and differentiate among basic formal music structures.

- D. Listen to and analyze recorded lessons, rehearsals, and performances using digital tools, and media-rich resources to enhance musical knowledge.

History and culture

- A. Recognize chronology that exists in all music and hypothetically, how the arts have impacted world culture.
- B. Compare and contrast the contributions of musical artists from an historical period and evaluate feelings.



PHYSICAL EDUCATION

I. Basic Movement Skills & Concepts

- A. Explain and demonstrate locomotor skills using appropriate form:
Walk, run, jump, hop, gallop, skip, slide, leap, chase, flee, dodge, and animal movements
- B. Demonstrate non-manipulative skills:
Turn, twist, roll, balance, transfer weight, jump, land, stretch, curl, and climb
- C. Participate in manipulative skills:
Throw, catch, collect, kick, punt, dribble, volley
(Optional equipment used: rope, wand, hoops, scoops, parachutes, bean bags, pins, balls, ribbons/scarves, darts, deck rings, frisbee, balloons, hippidy hops, sponges, foam paddles, plastic containers, striking equipment, jump bands, paddles, and foxtails)
- D. Use body management skills and demonstrate control when moving in relation to others, objects, and boundaries in personal and general space.
- E. Explain and demonstrate movement sequences, individually and with others, in response to various tempos, rhythms, and musical styles.
- F. Correct movement errors in response to feedback and explain how the change improves performance.

II. Team Sports

- A. Summarize the characteristics of good sportsmanship and demonstrate appropriate behavior as both a player and an observer.
- B. Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.
- C. Explain and demonstrate the use of basic offensive and defensive strategies. (Ex. player positioning, faking, dodging, creating open areas, and defending space).
- D. Acknowledge individual contributions of team members.
- E. Choose appropriate ways to motivate and celebrate accomplishments as a team.

III. Individual Sports/Recreational Games/Lifetime Activities

- A. Summarize the characteristics of good sportsmanship and demonstrate appropriate behavior as both a player and an observer.
- B. Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.
- C. Explain and demonstrate the use of basic offensive and defensive strategies.
- D. Choose appropriate ways to motivate and celebrate accomplishments.

IV. Fitness and Physical Activity

- A. Employ health related fitness.
- B. Demonstrate skill related fitness.
- C. Develop a health related fitness goal and track progress using health/fitness indicators (sweating, heart rate, heavy breathing, use of technology).
- D. Determine the physical, social, emotional, and intellectual benefits of regular physical activity.
- E. Discuss and describe personal fitness factors:
- F. Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.

V. Project Adventure (Optional Enrichment)

- A. Participate in modified/cooperative games and initiative activities.
- B. Summarize the characteristics of good sportsmanship.
- C. Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.

VI. Guided Discovery (Optional Enrichment)

- A. Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.

Attitudes and Values

1. Demonstrate positive feelings toward safety in physical education.
2. Demonstrate good sportsmanship.
3. Demonstrate positive attitude and behaviors toward self and others in physical education.
4. Appreciate physical activities for creating an avenue of self-expression.
5. Demonstrate a knowledge of rules, which enhances the success of the activity.
6. Understand the importance of maintaining physical fitness.
7. Appreciate physical activity for promoting mental and physical well-being.



SCIENCE

A. ORGANIZATION OF LIVING SYSTEMS: HUMAN BODY

1. Identify the major systems of the human body.
2. Describe the basic functions of the major systems of the human body including, but not limited to the digestive system, circulatory system, respiratory system, nervous system, skeletal system, and muscular system.
3. Examine how the systems of the body are interconnected and dependent on each other.
 - a. Examine how the skeletal and muscular systems of the human body are interconnected and dependent on each other.
 - b. Examine how the respiratory and circulatory systems of the human body are interconnected and dependent on each other.
 - c. Examine how the skeletal, muscular, respiratory, circulatory, digestive and nervous systems of the body are interconnected and dependent on each other to function as a total human body system.

4. Keep records that describe observations. Carefully distinguish actual observations from ideas and speculations that are understandable weeks and months later.

B. OUR CHANGING EARTH

1. a. Identify the crust, mantle, outer core and inner core as layers of the earth.
b. Explain that the crust is made of moving plates.
c. Identify the role of plate tectonics in the formation of mountains, volcanoes, and earthquakes.
d. Use tables and graphs to represent and interpret data.
2. a. Recognize that some changes of the Earth's surface are due to slow processes such as erosion and weathering.
b. Describe how moving water, wind and ice continually shape the Earth's surface by eroding rock and soil in some areas and depositing them in other areas.
c. Describe how dramatic changes also affect the surface of the Earth, i.e., meteor impact, volcanoes, earthquakes.
3. a. Observe that most rocks and soils are made of several substances and minerals.
b. Observe that the properties of soil vary from place to place and will affect the soil's ability to support life.
4. Recognize that fossils provide evidence about plants and animals that lived long ago as well as information about the environment at the time they were alive.
5. Use maps to locate and identify physical features on the Earth.

C. STRUCTURES AND PROPERTIES OF MATTER

1. Demonstrate that matter takes up space and has mass.
2. Classify matter by physical properties including characteristics that could be seen using magnification.
3. Observe that matter changes state by heating and cooling.
4. Observe that water can be a liquid or solid and can change from one to the other and the mass remains the same.
5. Demonstrate that water changes state when it reaches its freezing or boiling point.
6. Show that not all materials respond in the same way when exposed to similar conditions.
7. Differentiate between physical and chemical changes.
8. Show that by combining two or more materials chemically, the new material may have properties that are different from the original materials.
9. Develop problem-solving, decision making, and inquiry skills, reflected by formulating usable questions and hypotheses, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results. (Scientific process)
10. Integrate mathematics as a tool for problem solving in science, and as a means of expressing and/or modeling scientific theories. (Mathematical applications)

D. ENERGY TRANSFORMATIONS AND CONSERVATION

A. Forces

1. Recognize that some forces can act at a distance: (a) gravity; (b) magnetism; (c) static electricity
2. A force effects a push or a pull

B. Energy Transformations

1. Identify sources of heat and demonstrate that heat can be transferred from one object to energy in different ways.
2. Identify sources of light and demonstrate that light can be reflected from some surfaces and pass through others.

3. Examine devices that use electricity to produce heat, light, sound, and magnetic effect.
4. Show that differences in sound (loud or soft, high or low) can be produced by varying the way objects vibrate.
5. Integrate mathematics as a tool for problem solving in science, and as a means of expressing and/or modeling scientific theories. Measure forces.

C. Conservation

1. Differentiate between natural resources that are renewable and non-renewable.
2. Explain how meeting human requirements uses natural resources and therefore impacts the environment.



SOCIAL STUDIES

Civics, Government, Human Rights

Students will be able to:

- Explain how fundamental rights guaranteed by the U.S. Constitution and the Bill of Rights (i.e. freedom of expression, freedom of religion, the right to vote, and the right to due process) contribute to the continuation and improvement of American democracy.
- Explain how the U.S. Government is organized and how the U.S. Constitution defines and limits the power of government.
- Compare and contrast the roles and responsibilities of the three branches of the national government.
- Compare and contrast how government functions at the community, county, state, and national levels; the services provided (i.e. roads/highway maintenance), and the impact of policy decisions made at each level.
- Communicate with students from various countries about common issues and possible solutions.

Geography, People, And The Environment

Students will be able to:

- Identify the major world regions (i.e. Europe, Middle East, South America, Africa).
- Explain how to determine time zones and locations using latitude and longitude.
- Compare and contrast characteristics of regions in the U.S.
- Identify the states and state capitals of the U.S.
- Explain how geographic conditions can help us to understand cultural differences.
- Compare and contrast how science and technology have affected the environment.
- Identify and describe the actions taken to address the effect of science and technology on the environment.
- Plan a project to inform others about environmental issues and propose possible solutions. (i.e. fossil fuels) ***Language Arts link: persuasive writing

Economics, Innovation, and Technology

Students will be able to:

- Understand that opportunity is a factor in determining costs and in making decisions.
- Analyze the role of government in regulating the production of goods and services.
- Explain how importing and exporting affects global trade.
- Illustrate how markets and events affect production, distribution, and consumption of goods and services. (i.e. impact weather has on produce prices)
- Explain “debt” and “investment”.

- Recognize the importance of long-term goals of financial decision making within the school community.
- Evaluate the impact of ideas, inventions, and other contributions of prominent figures that lived in New Jersey and the United States. ***Language Arts link: biographies
- Describe the qualities of entrepreneurs in a capitalistic society. (i.e. Bill Gates, Oprah Winfrey, Thomas Edison) ***Language Arts link: biographies
- Describe the development of different transportation systems over time.
- Explain how changes in transportation have affected the economy in the U.S.
- Develop and implement a group plan to address an economic issue impacting children (i.e. work with student council or PTO)

History, Culture, and Perspectives

Students will be able to:

- Determine the impact of European colonization on Native American populations, including the Lenni Lenape of New Jersey.
- Describe how the influence of Native American groups, including the Lenni Lenape culture, is manifested in different regions of New Jersey.
- Explain how key events led to the creation of the U.S. and the state of New Jersey.
- Relate key historical documents (i.e. Declaration of Independence, U.S. Constitution, and the Bill of Rights (to present day government and citizenship).
- Explore key historical figures in the American Revolution. (i.e. George Washington, Benjamin Franklin, and Thomas Jefferson)
- Explain the role Governor William Livingston played in the development of New Jersey government.
- Determine the significance of New Jersey's role in the American Revolution.
- Identify actions that are unfair or discriminatory, such as bullying and propose solutions to address such actions.



TECHNOLOGY

K - 4 Objectives

I. Technology Operations and Concepts

1. Identify and use the basic features of a computer and its operating system
2. Identify basic hardware problems and solve simple problems (i.e. freezing, refresh/stop, force quit, restart, minimizing/closing windows, empty trash, quitting applications, login/log out).
3. Use technology terms in daily practice.
4. Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages both at home and at school.
5. Demonstrates appropriate keyboarding/mouse skills and correct posture.
6. Create a document with text using a word processing program.
7. Create a visual composition using basic tools (brush, bucket, spray can, color palette, eraser, shape, line and text tools).
8. Demonstrate the ability to navigate in developmentally appropriate virtual environments (websites).

9. Use a digital camera to take a picture.
10. Illustrate and communicate original ideas and stories using digital tools and media-rich resources.
11. Produce a media-rich digital story about a significant local event or issue based on first-person interviews.

II. Digital Citizenship

1. Model legal and ethical behaviors when using both print and non-print information by citing resources.
2. Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.
3. Analyze the need for and use of copyrights.
4. Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.

III. Research and Information Literacy

1. Use the Internet to explore and investigate information with a teacher’s support.
2. Use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions.
3. Investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps.
4. Investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps.

IV. Critical Thinking, Problem Solving, and Decision-Making

1. Navigate the basic functions of a browser, including how to open or close windows and use the “back” key.
2. Use mapping tools to plan and choose alternate routes to and from various locations.
3. Select and apply digital tools to collect, organize, and analyze data that support a scientific finding.



VISUAL ARTS

Objectives for Grades 3, 4, 5

The Creative Process:

1. Identify elements of art and principles of design that are evident in everyday life.
2. Compare and contrast works of art in various mediums that use the same art elements and principles of design.

History of Arts and Culture:

1. Recognize works of dance, music, theatre, and visual art as a reflection of societal values and beliefs.

2. Relate common artistic elements that define distinctive art genres in dance, music, theatre, and visual art.
3. Determine the impact of significant contributions of individual artists in dance, music, theatre, and visual art from diverse cultures throughout history.

Performing:

1. Work individually and collaboratively to create two- and three-dimensional works of art that make cohesive visual statements and that employ the elements of art and principles of design.
2. Identify common and distinctive characteristics of artworks from diverse cultural and historical eras of visual art using age-appropriate stylistic terminology (e.g., cubist, surreal, optic, impressionistic), and experiment with various compositional approaches influenced by these styles.
3. Identify common and distinctive characteristics of genres of visual artworks (e.g., realism, surrealism, abstract/nonobjective art, conceptual art, and others) using age-appropriate terminology, and experiment with various compositional approaches influenced by these genres.
4. Differentiate drawing, painting, ceramics, sculpture, printmaking, textiles, and computer imaging by the physical properties of the resulting artworks, and experiment with various art media and art mediums to create original works of art.
5. Collaborate in the creation of works of art using multiple art media and art mediums, and present the completed works in exhibition areas inside and outside the classroom.

Aesthetic Responses & Critique Methodologies

A. Aesthetic Responses

- Employ basic, [discipline-specific arts terminology](#) to categorize works of dance, music, theatre, and visual art according to established classifications.
- Make informed aesthetic responses to artworks based on structural arrangement and personal, cultural, and historical points of view.
- Demonstrate how art communicates ideas about personal and social values and is inspired by an individual's imagination and frame of reference (e.g., personal, social, political, historical context).

B. Critique Methodologies

- Assess the application of the elements of art and principles of design in dance, music, theatre, and visual artworks using observable, objective criteria.
- Use evaluative tools, such as rubrics, for self-assessment and to appraise the objectivity of critiques by peers.
- Use discipline-specific arts terminology to evaluate the strengths and weaknesses of works of dance, music, theatre, and visual art.
- Define technical proficiency, using the elements of the arts and principles of design.
- Distinguish ways in which individuals may disagree about the relative merits and effectiveness of artistic choices in the creation and performance of works of dance, music, theatre, and visual art.



WORLD LANGUAGE

Telling Time

Students will be able to:

- State the time in Spanish
- Express specific time of assorted activities.
- Compare and contrast meal and school schedules in target countries and the US

Food

Students will be able to:

- Express food likes and dislikes.
- Identify main meals in target cultures.
- Identify basic foods; use verbs “to eat” and “to drink” in 1st, 2nd, and 3rd person.
- Use definite/indefinite articles with foods and beverages.

House and Home

Students will be able to:

- Identify the rooms in a house
- Compare and contrast American houses and those in target countries.
- Locate objects and characters inside and outside the house.