



## **NORTHERN VALLEY SCHOOLS CONSORTIUM**

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

### **CURRICULUM OBJECTIVES: GRADE SIX**

**COMPREHENSIVE HEALTH**

**LANGUAGE ARTS**

**MATHEMATICS**

**MUSIC**

**PHYSICAL EDUCATION**

**SCIENCE**

**SOCIAL STUDIES**

**TECHNOLOGY**

**VISUAL ARTS**

**WORLD LANGUAGES**

2014 - 2015



**NORTHERN VALLEY SCHOOLS CONSORTIUM  
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# COMPREHENSIVE HEALTH



## WELLNESS

### **I. Personal Health**

1. Understand the physical, social, emotional and intellectual dimensions of wellness.
2. Discuss how health data, such as blood pressure, body composition, and cholesterol can be used to assess and improve wellness.
3. Discuss how health knowledge, health choices, self-control, resistance and self-management skills influence wellness.
4. Describe how technology impacts wellness.

### **II. Growth and Development**

1. Recall various body systems, their parts and functions.
2. Compare the rate of physical, social, emotional and intellectual change during various life stages and discuss ways to foster healthy growth.

### **III. Nutrition**

1. Discuss factors that influence food choices.
2. Assess the short and long term benefits and risks associated with nutritional choices.

### **IV. Diseases and Health Conditions**

1. Compare and contrast methods used to diagnose and treat diseases and health conditions.
2. Differentiate among communicable, non-communicable, acute, chronic and inherited diseases and health conditions.
3. Compare and contrast diseases and health conditions prevalent in adolescents.

### **V. Safety**

1. Compare and contrast the incidents and characteristics of intentional and unintentional injuries in adolescence.
2. Discuss the physical, social and emotional impacts of all forms of abuse and discuss what to do if any form of abuse is suspected or occurs.

### **VI. Social and Emotional Health**

1. Describe the physical and emotional signs of stress and the short and long term impacts of stress on the human body.
2. Compare and contrast ways that individuals, families and communities cope with change, crisis, rejection, loss, and separation.
3. Discuss how stereotyping might influence one's goals, choices and behaviors.
4. Compare and contrast forms of mental illness such as phobias, anxiety, panic disorders, and depression.
5. Compare and contrast the incidence and characteristics of intentional, unintentional, and injuries in adolescents.

## **INTEGRATED SKILLS**

### **I. Communication**

1. Summarize health information from a variety of valid and reliable health resources.
2. Present health information using a multi-media approach, adapting the wording and deliver method for the topic and audience.
3. Compare and contrast the economic and social purposes of health messages presented in the media.

### **II. Decision Making**

1. Analyze the influence of family, peers, and the media on health decisions and investigate how conflicting interests may influence decisions and choices.
2. Analyze significant health decisions and discuss how the outcome might have been different if a different decision had been made.
3. Explain how personal ethics influence decision making.

### **III. Planning and Goal Setting**

1. Summarize strategies to support the achievement of short and long term health goals.

### **IV. Character Development**

1. Elaborate on the characteristics of role models and how role models influence the personal goals and ethical standards of others.

### **V. Leadership, Advocacy and Service**

1. Compare various forms of leadership and implement appropriate leadership strategies when serving a leadership role.
2. Discuss how individuals can make a difference by helping others, opportunities for volunteer service, and participate in activities through school or community-based health or service organizations.
3. Formulate and express a position on health issues and educate peers about the health issue or cause.
4. Discuss local and state laws that impact personal, family, and community wellness and formulate ways that individuals and groups can work together to improve wellness.

### **VI. Health Services and Careers**

1. Investigate health and fitness career opportunities.

## **DRUGS AND MEDICINE**

### **I. Medicines**

1. Describe factors that impact the effectiveness of a medicine.

### **II. Alcohol, Tobacco, and Other Drugs**

1. Discuss the classifications of illegal drugs and controlled substances and give examples of each.
2. Describe the physical and behavioral effects of each classification of drugs.
3. Understand the relationship between injected drug use and diseases such as HIV/AIDS and hepatitis.
4. Discuss the legal and financial consequences of the use, sale, and possession of illegal substances.

### **III. Dependency/Addiction and Treatment**

1. Describe the signs and symptoms of a substance abuse problem and the stages that lead to dependency/addiction.
2. Identify ways to quit using alcohol, tobacco, and other drugs and discuss factors that support an individual to quit.
3. Discuss factors that contribute to the use and abuse of alcohol, tobacco, and other drugs by adolescents, such as advertising and the media, group pressures, low self-esteem, genetics, and poor role models.
4. Describe how substance abuse affects the individual and the family and describe ways that family and friends can support a drug-free lifestyle.

## **HUMAN RELATIONSHIPS AND SEXUALITY**

### **I. Relationships**

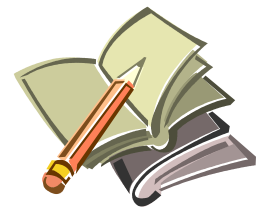
1. Describe the characteristics of a healthy relationship and discuss factors that support and sustain it.
2. Describe how peer relationships may change during adolescence.
3. Discuss different forms of dating and explain the role of dating in personal growth.
4. Understand the concepts of gender and gender identification.

### **II. Sexuality**

1. Describe strategies to remain abstinent and resist pressures to become sexually active.
2. Discuss the possible physical, social, and emotional impacts of adolescent sexual activity.
3. Identify sexual feelings common to young adolescents and differentiate between having sexual feelings and acting on them.
4. Discuss how parents, peers, and the media influence attitudes about sexuality.

### **III. Pregnancy and Parenting**

1. Discuss fertilization, embryonic development, and fetal development.
2. Recommend prenatal practices that support a healthy pregnancy.
3. Discuss the potential challenges faced by adolescent parents and their families.
4. Recommend sources of information and help for adolescent parents.



## **LANGUAGE ARTS**

### **Reading Standards for 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 Standards for 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.
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 formats and media, 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.

## **Writing Standards**

### **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.
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, revising, editing, rewriting, or trying a new approach.
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 Standards**

##### **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 Standards**

##### **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

## **Literacy in History and Social Studies Standards**

### **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.

## **Literacy in Science and Technical Subjects Standards**

### **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.

## **Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Standards**

### **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, revising, editing, rewriting, or trying a new approach.
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.



# MATHEMATICS



## **Ratios and Proportional Relationships**

### **Understand ratio concepts and use ratio reasoning to solve problems.**

1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
2. Understand the concept of a unit rate  $a/b$  associated with a ratio  $a:b$  with  $b \neq 0$ , and use rate language in the context of a ratio relationship.
3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
  - a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
  - b. Solve unit rate problems including those involving unit pricing and constant speed.
  - c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.
  - d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

## **The Number System**

### **Apply and extend previous understandings of multiplication and division to divide fractions by fractions.**

1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

### **Compute fluently with multi-digit numbers and find common factors and multiples.**

2. Fluently divide multi-digit numbers using the standard algorithm.
3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

### **Apply and extend previous understandings of numbers to the system of rational numbers.**

5. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
  - a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g.,  $-(-3) = 3$ , and that 0 is its own opposite.

- b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
  - c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
7. Understand ordering and absolute value of rational numbers.
    - a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.
    - b. Write, interpret, and explain statements of order for rational numbers in real-world contexts.
    - c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.
    - d. Distinguish comparisons of absolute value from statements about order.
  8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

## **Expressions and Equations**

### **Apply and extend previous understandings of arithmetic to algebraic expressions.**

1. Write and evaluate numerical expressions involving whole-number exponents.
2. Write, read, and evaluate expressions in which letters stand for numbers.
  - a. Write expressions that record operations with numbers and with letters standing for numbers.
  - b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity
  - c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
3. Apply the properties of operations to generate equivalent expressions.
4. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).

### **Reason about and solve one-variable equations and inequalities.**

5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
7. Solve real-world and mathematical problems by writing and solving equations of the form  $x + p = q$  and  $px = q$  for cases in which  $p$ ,  $q$  and  $x$  are all nonnegative rational numbers.
8. Write an inequality of the form  $x > c$  or  $x < c$  to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form  $x > c$  or  $x < c$  have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

## **Represent and analyze quantitative relationships between dependent and independent variables.**

9. Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.

## **Geometry**

### **Solve real-world and mathematical problems involving area, surface area, and volume.**

1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas  $V = l w h$  and  $V = b h$  to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems

## **Statistics and Probability**

### **Develop understanding of statistical variability.**

1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

### **Summarize and describe distributions.**

4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
5. Summarize numerical data sets in relation to their context, such as by:
  - a. Reporting the number of observations.
  - b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
  - c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
  - d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.



# MUSIC



## General Music

### **Performance**

- a. Examine works of music that communicate significant cultural beliefs or sets of values.
- b. Use specific vocabulary relating to symbolism, genre and performance techniques in all music areas.
- c. Perform independently and in groups a repertoire of diverse music.
- d. Improvise music in a selected genre or style, using the elements of music that are consistent with basic playing and/or singing techniques in that genre or style.
- e. Perform instrumental or vocal compositions using complex standard and non-standard Western, non-Western, and avant-garde notation.

### **Reading and notation**

- a. Perform compositions containing progressively complex notations.
- b. Improvise original melodies and/or rhythms.

### **Listening and responding**

- a. Distinguish among musical styles, trends and movements in various musical forms.
- b. Examine how aspects of meter, rhythm, tonality, intervals, and chords are organized to establish unity and variety in musical compositions.
- c. Compare and contrast musical works from specific historical periods.
- d. Analyze the elements of music in a diversity of musical works.

### **Critiquing**

- a. Compare and contrast musical works from specific historical periods using the progression of description, analysis, interpretation, and evaluation.
- b. Evaluate the judgment of others based on the process of critique.
- c. Compare and contrast the technical proficiency of artists.

### **History and Culture**

- a. Analyze how technological changes have influenced the development of music.
- b. Identify the common musical elements that help define a given historical period.
- c. Examine social, political, and cultural influence on art.

### **Connections**

- a. Identify careers and lifelong opportunities in the music field.
- b. Describe various roles that musicians perform and identify representative individuals and their achievements that have functioned in each role.

## Instrumental Music

### **Performance**

- a. Examine works of music that communicate significant cultural beliefs or sets of values.
- b. Use specific vocabulary relating to symbolism, genre, and performance techniques in all music areas.
- c. Play independently and in groups a repertoire of diverse music

### **Reading and notation**

- a. Play compositions containing progressively complex notations
- b. Communicate ideas about the social and personal value of music.

## Listening and responding

- a. Distinguish among musical styles, trends, and movements in various musical forms.
- b. Examine how aspects of meter, rhythm, tonality, intervals and chords are organized to establish unity and variety in musical compositions.
- c. Compare and contrast musical works from specific historical periods.

## Critiquing

- a. Analyze the elements of music in a diversity of musical works.
- b. Evaluate the effectiveness of a work of art by differentiating between the artist's technical proficiency and the work's content or form.
- c. Compare and contrast musical works from specific historical periods using the progression of description, analysis, interpretation, and evaluation.
- d. Compare and contrast the technical proficiency of artists.
- e. Listen to and analyze recorded lessons, rehearsals, and performances using digital tools, and media-rich resources to enhance musical knowledge.

## History and culture

- a. Analyze how technological changes have influenced the development of music.
- b. Identify the common musical elements that help define a given historical period.
- c. Differentiate the history of music in world cultures



## PHYSICAL EDUCATION

### A. Movement Skills and Concepts

1. Explain and perform movement skills that combine mechanically correct movement in smooth flowing sequences in isolated settings (i.e., skill practice) and applied settings (i.e., games, sports, dance, and recreational activities).
2. Explain concepts of force and motion and demonstrate control while modifying force, flow, time, space, and relationships in interactive dynamic environments.
3. Create and demonstrate planned movement sequences, individually and with others, based on tempo, beat, rhythm, and music (creative, cultural, social and fitness dance).
4. Use self-evaluation and external feedback to detect and correct errors in one's movement performance.

### B. Strategy

1. Work cooperatively and productively in a group to accomplish a set goal.
2. Demonstrate the use of offensive, defensive, and cooperative strategies in individual, dual, and team activities.
3. Compare and contrast strategies used to impact individual and team effectiveness and make modifications for improvement.

### C. Sportsmanship, Rules, and Safety

1. Compare the roles and responsibilities of players and observers and recommend strategies to enhance sportsmanship-like behavior.

2. Apply rules and procedures for specific games, sports, and other competitive activities and describe how they enhance participation and safety.
3. Relate the origin and rules associated with certain games, sports, and dances to different cultures.

#### **D Fitness and Physical Activity**

1. Analyze the social, emotional, and health benefits of selected physical experiences.
2. Determine to what extent various activities improve skill-related fitness versus health-related fitness.
3. Develop and implement a fitness plan based on the assessment of one's personal fitness level, and monitor health/fitness indicators before, during, and after the program.
4. Predict how factors such as health status, interests, environmental conditions, and available time may impact personal fitness based on age and gender.
5. Relate physical activity, healthy eating, and body composition to personal fitness and health.
6. Explain and apply the training principles of frequency, intensity, time, and type (FITT) to improve personal fitness.
7. Evaluate the short- and long-term effects of anabolic steroids and other performance-enhancing substances on personal health.
8. Engage in moderate to vigorous forms of physical activity that address each component of fitness.

#### **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. STRUCTURE AND MOVEMENT OF THE EARTH**

##### **A. STRUCTURE**

1. Identify and describe the layers of the Earth by composition and physical properties.
2. Explain how scientists learn about the Earth's interior.

##### **B. MOVEMENT**

1. Recognize that the Earth's crust is under stress and always changing.
2. Describe compression, tension, faulting, folding.
3. Scrutinize how the three major types of faults differ (normal, reverse, strike/slip)
4. Compare and contrast the three primary kinds of folds: anticline, syncline, monocline.
5. Describe how various types of mountains form.
6. Deduce the origin and causes of earthquakes.
7. Describe how earthquakes travel through the Earth.
8. Explain how earthquakes are detected and located.
9. Describe how the strength of an earthquake is measured.



10. Compare and contrast the types of volcanoes.
11. Differentiate between non-explosive and explosive volcanic eruptions.
12. Explain the link between the composition of magma and the type of volcanic eruption that will occur.
13. Analyze the effects that volcanoes have on the crust.
14. Describe the formation and movement of magma.
15. Create a timeline which traces the history and evidence of plate tectonics.
  
16. Investigate the relationship among volcanoes, earthquakes, and tectonic plate movement.
17. Utilize various tools such as map projections and topographical maps to interpret features of Earth's surface. (Example: Google Earth)

## **B. ROCKS AND THE ROCK CYCLE**

1. Describe how rocks are classified, how they are formed, their composition and texture.
2. Contemplate how the cooling rate of magma affects the properties of igneous rock.
3. Distinguish between intrusive igneous rock and extrusive igneous rock.
4. Identify common types of igneous rock.
5. Describe how the types of sedimentary rock form.
6. Explain how sedimentary rock, their layer sequence, and the fossils found in them tell the factual story of the age, history, changing life forms, and geology of Earth
7. Describe what causes metamorphism.
8. Explain the effect of metamorphism on the mineral composition of rocks.
9. Compare and contrast foliated and non-foliated metamorphic rock.
10. Summarize the changes a rock must undergo as it moves through the rock cycle.
11. Determine the specific gravity (density) of a rock using the water displacement method to obtain the volume.

## **C. CHANGES TO THE SURFACE OF THE EARTH**

1. Determine how air, rivers, tree roots, and animals cause mechanical weathering of rock.
2. Examine how water, acids, and air cause chemical weathering of rock.
3. Describe the link between the rate of weathering to the composition of the rock and the rock's total surface area.
4. Explain the factors that affect the rate of weathering: the composition of rock, a rock's total surface area, differences in elevation and climate.
5. Cite examples of how mechanical and chemical weathering interact to break down rocks and minerals.
6. Explain the link between weathering and soil formation.
7. Contrast residual and transported soil.
8. Identify the three soil horizons.
9. Describe how soil properties can affect an ecosystem.
10. Fossils provide evidence of how life and environmental conditions have changed. (Uniformitarianism)
11. Identify and describe the effects of human activity on the Earth's surface: pollution, acid rain, strip mining, and development
12. Explain wind erosion and describe its effects.
13. Summarize why glaciers are important agents of erosion and deposition.

## **D. ATMOSPHERE AND WEATHER**

1. Discuss the composition of the Earth's atmosphere.
2. Determine why pressure changes with altitude.
3. Explain how temperature changes with altitude.

4. Describe the layers of the atmosphere.
5. Describe how wind, ocean currents, and storms are as a result of radiation reaching the Earth. (Explain the relatively high frequency of tornadoes in “Tornado Alley”.)
6. Summarize the processes and cite real-world examples of radiation, conduction, and convection (ie. How it relates to the evolution of a hurricane).
7. Explain how the greenhouse effect could contribute to global warming.
8. Explain the relationship between air pressure and wind direction.
9. Describe the global patterns of wind.
10. Examine the causes of local wind patterns.
11. Describe the major types of air pollution and name their causes.
12. When a new substance is made by the combining two or more substances, it has properties that are different from the original substances using the chemical reaction of acid rain.
13. Determine how air pollution can affect human health.
14. Explain how air pollution can be reduced.
15. Define relative humidity.
16. Explain dew point and its relationship to condensation.
17. Compare and contrast the three major cloud forms. (Cumulus, Stratus, Cirrus)
18. Develop a link between the Earth’s atmosphere and weather.
19. Earth has a magnetic field that is detectable at the surface with a compass.
20. Earth’s magnetic field has a north and south poles and lines of force that are used for navigation.

## **E. WATER**

### **A. Properties**

1. Apply previous knowledge of the water cycle to analyze the path of a drop of water.
2. Identify and describe the location of the water table.
3. Describe the characteristics of an aquifer.
4. Examine how ground water can be both a renewable and non-renewable resource.
5. Summarize the properties and other aspects of ocean water.
6. Summarize the interaction between the ocean and the atmosphere.

### **B. Rivers**

1. Explain the major factors that affect the rate of stream erosion.
2. Compare and contrast the stages of river development.
3. Explain the relationship between rich agricultural regions and river flood plains.

### **C. Oceans**

1. Explain the connection between storms and wave erosion.
2. Deduce why waves break in shallow water.
3. Identify the physical and chemical properties of water including volume, mass, solubility, phases, boiling point, melting point and surface tension. Recognize that boiling point, melting point, and solubility are independent of the amount of sample.
4. Identify and describe the parts of the continental margin and the ocean floor.
5. Describe technologies for studying the ocean floor.
6. Identify and describe the major groups of marine organisms.
7. Compare and contrast the ocean’s living and non-living resources.
8. Describe the ocean’s energy sources, tidal and wave energy.
9. Assess the impact of different types of ocean pollution.
10. Describe surface currents and list the three factors that control them.
11. Describe deep currents.
12. Illustrate the factors involved in deep-current movement.
13. Explain how currents affect climate.
14. Identify wave components and explain how they relate to wave movement.

15. Describe how ocean waves form and how they move.
16. Classify types of waves.
17. Analyze types of dangerous waves and currents.
18. Explain tides and their relationship with the Earth, the sun, and the moon.
19. Classify different types of tides.
20. Analyze the relationship between tides and coastal land.



## SOCIAL STUDIES

**Current Events: Students will become familiar with local, state, national, and international news as determined by the teacher to be relevant and appropriate.**

### **Prehistory**

1. Explain how archaeological discoveries are used to develop and enhance understanding of life prior to written records.
2. Compare and contrast the social organization of early hunters/gatherers and those who lived in early agrarian societies.
3. Explain the various migratory patterns of hunters/gatherers who moved from Africa to Eurasia, Australia, and the Americas, and describe the impact of migration on their lives and on the shaping of societies.
4. Compare and contrast how nomadic and agrarian societies used land and natural resources.
5. Relate the agricultural revolution to population growth and the subsequent development of civilizations.
6. Determine the impact of technological advancements on hunter/gatherer and agrarian societies.
7. Demonstrate an understanding of pre-agricultural and post-agricultural periods in terms of relative length of time.
8. Relate the development of language and forms of writing to the expression of ideas, creation of cultural identity, and development of more complex social structures.

### **Ancient River Valley Civilizations**

1. Analyze the geographical factors that influenced the development of civilizations in Mesopotamia, Egypt, Indus River and Yellow River Valley.
2. Analyze the cultural factors that led to the rise and fall of various ancient river valley civilizations.
3. Justify which of the major achievements of the ancient river valley civilizations represent the most enduring legacies.
4. Determine the role of slavery in the economic and social structures of ancient river valley civilizations.

### **Greece and Rome**

1. Determine how geography and the availability of natural resources influenced the development of the political, economic, and cultural systems of each of the classical civilizations and provided motivation for expansion.
2. Compare and contrast social hierarchies in classical civilizations as they relate to power, wealth, and equality.

3. Compare and contrast the methods used by the rulers of Rome, China, and India to control and unify their expanding empires.
4. Compare and contrast the rights and responsibilities of free men, women, slaves, and foreigners in the political, economic, and social structures of classical civilizations.
5. Determine the foundational concepts and principles of Athenian democracy and the Roman Republic that later influenced the development of the United States Constitution.
6. Analyze the impact of expanding land and sea trade routes through the Mediterranean Basin.
7. Explain how the development of a uniform system of exchange facilitated trade in classical civilizations.
8. Explain how classical civilizations used technology and innovation to enhance agricultural/manufacturing output and commerce, to expand military capabilities, to improve life in urban areas, and to allow for greater division of labor.

### **Expanding, Exchanges, and Encounters (500 ACE – 1450 BCE)**

1. Explain how geography and religion influenced the development of the political, economic, and cultural centers of each empire and well as the empires' relationships with other parts of the world.
2. Assess how maritime and overland trade routes impacted urbanization, transportation, communication, and the development of international trade centers.
3. Analyze the motivations for civilizations to modify the environment.
4. Determine the positive and negative consequences of environmental changes made during this time period, and relate these changes to current environmental challenges.
5. Explain how contact between nomadic peoples and sedentary populations had both positive and negative political, economic, and cultural consequences.
6. Explain the interrelationships among the major technological innovations and cultural contributions of the civilizations of this period, and justify which represent enduring legacies such as improved agricultural production, population growth, urbanization, and commercialization.
7. Explain why the strategic location and economic importance of Constantinople and the Mediterranean Sea were a source of conflict between civilizations.
8. Explain how the development of new business practices and banking systems impacted global trade and the development of a merchant class.
9. Explain why the strategic location and economic importance of Constantinople and the Mediterranean Sea were a source of conflict between civilizations.
10. Analyze the causes and outcomes of the Crusades from different perspectives, including the perspectives of European political and religious leaders, the crusaders, Jews, Muslims, and traders.
11. Assess the demographic, economic, and religious impact of the plague on Europe.
12. Determine which events led to the rise and eventual decline of European feudalism.
13. Analyze the immediate and long-term impact on China and Europe of the open exchange between Europe and the Yuan (Mongol) Dynasty.
14. Determine the extent to which the Byzantine Empire influenced the Islamic world and western Europe and Africa.
15. Compare and contrast the Japanese and European systems of feudalism and the effectiveness of each in promoting social, economic, and political order.
16. Determine the influence of medieval English legal and constitutional practices on modern democratic thought and institutions.
17. Determine the extent to which interaction between the Islamic world and medieval Europe increased trade, enhanced technology innovation, and impacted scientific thought and the arts.



## TECHNOLOGY



### Grades 5-8 Objectives

#### **I. Technology Operations and Concepts: Word Processing, Keyboarding**

1. Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
2. Plan and create a simple database, define fields, input data, and produce a report using sort and query.
3. Create and present a multimedia presentation that includes graphics.
4. Generate a spreadsheet to calculate, graph, and present information.
5. Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.

#### **II. Creativity and Innovation**

1. Synthesize and publish information about a local or global issue or event on a collaborative, web-based service (also known as a shared hosted service).

#### **III. Communication and Collaboration**

1. Participate in an online learning community with learners from other countries to understand their perspectives on a global problem or issue, and propose possible solutions.

#### **IV. Digital Citizenship**

1. Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.
2. Summarize the application of fair use and Creative Commons guidelines.
3. Demonstrate how information on a controversial issue may be biased.

#### **V. Research and Information Literacy**

1. Gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem.

#### **VI. Critical Thinking, Problem Solving, and Decision-Making**

1. Use an electronic authoring tool in collaboration with learners from other countries to evaluate and summarize the perspectives of other cultures about a current event or contemporary figure.



# VISUAL ARTS

## Objectives for Grades 6, 7, 8



### **The Creative Process:**

1. Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures.
2. Compare and contrast various masterworks of art from diverse cultures and identify elements of the works that relate to specific cultural heritages.

### **History of Arts and Culture:**

1. Map historical innovations in dance, music, theatre, and visual art that were caused by the creation of new technologies.
2. Differentiate past and contemporary works of dance, music, theatre, and visual art that represent important ideas, issues, and events that are chronicled in the histories of diverse cultures.
3. Analyze the social, historical, and political impact of artists on culture and the impact of culture on the arts.

### **Performing**

1. Incorporate various art elements and the principles of balance, harmony, unity, emphasis, proportion, and rhythm/movement in the creation of two- and three- dimensional artworks, using a broad array of art media and art mediums to enhance the expression of creative ideas (e.g., perspective, implied space, illusionary depth, value, and pattern).
2. Apply various art media, art mediums, technologies, and processes in the creation of allegorical, theme-based, two- and three-dimensional works of art, using tools and technologies that are appropriate to the theme and goals.
3. Identify genres of art (including realism, abstract/nonobjective art, and conceptual art) within various contexts using appropriate art vocabulary, and solve hands-on visual problems using a variety of genre styles.
4. Delineate the thematic content of multicultural artworks, and plan, design, and execute multiple solutions to challenging visual arts problems, expressing similar thematic content.
5. Examine the characteristics, thematic content, and symbolism found in works of art from diverse cultural and historical eras, and use these visual statements as inspiration for original artworks.
6. Synthesize the physical properties, processes, and techniques for visual communication in multiple art media (including digital media), and apply this knowledge to the creation of original artworks.

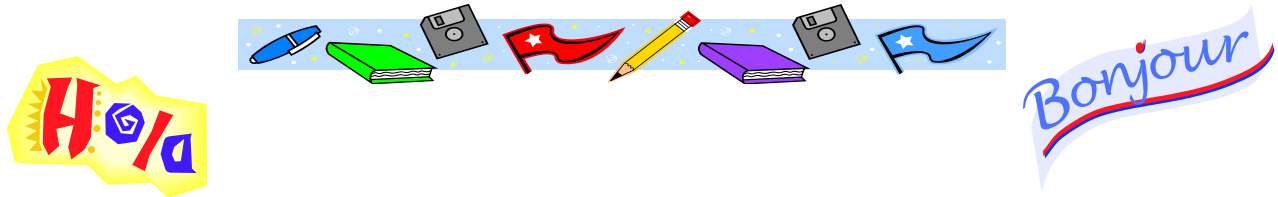
### **Aesthetic Responses**

1. Generate observational and emotional responses to diverse culturally and historically specific works of dance, music, theatre, and visual art
2. Identify works of dance, music, theatre, and visual art that are used for utilitarian and non-utilitarian purposes.
3. Distinguish among artistic styles, trends, and movements in dance, music, theatre, and visual art within diverse cultures and historical eras.
4. Compare and contrast changes in the accepted meanings of known artworks over time, given shifts in societal norms, beliefs, or values.
5. Interpret symbolism and metaphors embedded in works of dance, music, theatre, and visual art.
6. Differentiate between “traditional” works of art and those that do not use conventional elements of style to express new ideas.

7. Analyze the form, function, craftsmanship, and originality of representative works of dance, music, theatre, and visual art.

### **Critique Methodologies**

1. Evaluate the effectiveness of a work of art by differentiating between the artist's technical proficiency and the work's content or form.
2. Differentiate among basic formal structures and technical proficiency of artists in works of dance, music, theatre, and visual art.
3. Compare and contrast examples of archetypal subject matter in works of art from diverse cultural contexts and historical eras by writing critical essays.



## **WORLD LANGUAGE**

### **Professions**

1. Students will use appropriate forms of “to be” to identify professions.
2. Practice adjective agreement.
3. Use definite and indefinite articles as they relate to profession.

### **Transportation and Places in the Community**

1. Describe places to go using appropriate forms of the verb “to go”.
2. Identify modes of transportation.
3. Use interrogative words when asking questions.

### **Present Tense Verbs**

1. Identify and use first conjugation verbs in all forms.
2. Identify and use subject pronouns.