

ESSENTIAL CURRICULUM STANDARDS

6th Grade

Learning is a continuous process that involves the home as well as the school. Children benefit greatly when they know that their parents are interested in and supportive of education. We invite you to join us as partners in this venture.

Each child grows and develops individually. There are, however, general characteristics and needs which apply to most children of a certain age. Knowing these characteristics provides teachers and parents a better understanding of the child.

Sixth grade children are becoming quite independent, and are approaching adolescence physically, mentally, and socially. They are energetic and daring, interested in organized games, and growing rapidly, with the girls generally outgrowing the boys. They are desirous of peer group approval, assertive, and quite self-conscious about undertaking physical activity unless skilled. They are sensitive to the possibility of hurting people's feelings, therefore less critical.

Sixth grade students will probably have an ability to analyze situations and discuss problems, a willingness to practice in order to become good in sports, periods of sluggishness or inattention, and poor posture or awkwardness. They will have a tendency to associate with their own gender, have an awareness of the opposite sex, and frequent crushes on peers or adults.

THE SIXTH GRADE CHILD NEEDS:

- attention and praise
- to understand relationships between wants and family income
- a place where his/her privacy and possessions are respected
- a chance to earn and spend money
- a feeling of importance in family and group planning
- to shine in some activity valued by his peers
- awareness of society's values
- encouragement to demonstrate increased academic and social responsibility in order to facilitate a successful transition to middle school

PARENTS CAN HELP BY:

- listening and talking to your child
- setting an example by reading and writing
- attending parent conferences, Back to School Night, Open House, and other school activities
- knowing homework policy (approximately 60 minutes daily or 5 hours weekly)
- establishing a regular routine for completion of homework
- providing a quiet time and place for study
- offering encouragement and help in completing assignments as needed
- taking educational trips
- monitoring your child's television viewing
- notifying school of problems in the home that cause emotional stress for the child (divorce, death in family)
- seeing that your child attends school regularly and on time
- giving praise for good work and behavior
- maintaining a positive attitude about your child's school

English/Language Arts: Essential Standards

Reading

- Demonstrates an understanding of semantic relationships in grade level narrative and expository texts. (6RCV1.7)
- Demonstrates an understanding of vocabulary in grade level narrative and expository texts. (6RCV1.8)
- Identify and interpret figurative language and words with multiple meanings. (6R1.2)

Reading Comprehension

- **QUESTIONING:** Demonstrate comprehension by identifying answers in the text. (6RCV2.14)
- **CLARIFYING** Clarify an understanding of texts by creating outlines, logical notes, summaries, or reports. (6R2.4)
- **INFERRING:** Draw inferences, conclusions, or generalizations about text and support them with textual evidence and prior knowledge. (6RCV2.16)
- **INFERRING:** Distinguish facts, supported inferences, and opinions in text. (6RCV2.17)
- Identify the structural features of popular media (e.g., newspapers, magazines, online information) and use the features to obtain information. (6R2.1)
- Analyze text that uses the compare-and-contrast organizational pattern. (6R2.2)
- Follow multiple-step instructions for preparing applications (e.g., for a public library card, bank savings account, sports club, league membership). (6R2.5)
- Determine the adequacy and appropriateness of the evidence for an author's conclusions. (6R2.6)
- Make reasonable assertions about a text through accurate, supporting citations. (6R2.7)
- Note instances of unsupported inferences, fallacious reasoning, persuasion, and propaganda in text. (6R2.8)

Literary Response and Analysis

- Identify the forms of fiction and describe the major characteristics of each form. (6R3.1)
- Identify and analyze features of themes conveyed through characters, actions, and images. (6R3.6)
- Explain the effects of common literary devices (e.g., symbolism, imagery, metaphor) in a variety of fictional and nonfictional texts. (6R3.7)
- Define how tone or meaning is conveyed in poetry through word choice, figurative language, sentence structure, line length, punctuation, rhythm, repetition, and rhyme. (6R3.4)

Writing

- Choose the form of writing (e.g., personal letter, letter to the editor, review, poem, report, narrative) that best suits the intended purpose. (6W1.1)
- Use a variety of effective and coherent organizational patterns, including comparison and contrast; organization by categories; and arrangement by spatial order, order of importance, or climactic order. (6W1.3)
- Create multiple-paragraph expository compositions: (6W1.2)
 - a. Engage the interest of the reader and state a clear purpose. (6W1.2a);
 - b. Develop the topic with supporting details and precise verbs, nouns, and adjectives to paint a visual image in the mind of the reader. (6W1.2b)
 - c. Conclude with a detailed summary linked to the purpose of the composition. (6W1.2c)
- Use simple, compound, and compound-complex sentences; use effective coordination and subordination of ideas to express complete thoughts. (6E1.1)
- Identify and properly use indefinite pronouns and present perfect, past perfect, and future perfect verb tenses; ensure that verbs agree with compound subjects. (6E1.2)
- Write legibly. (6ECV1.6)

- Spell frequently misspelled words correctly (e.g., their, they're, there). (6E1.5)
- Spell roots, inflections, suffixes, prefixes, contractions, and syllable constructions correctly. (6ECV1.7)
- Use colons after the salutation in business letters. (6E1.3a)
- Use semicolons to connect independent clauses. (6E1.3b)
- Use commas when linking two clauses with a conjunction in compound sentences. (6E1.3c)
- Use various reference materials (e.g., dictionary, thesaurus, card catalog, encyclopedia, online information) as an aid to writing. (6WCV1.7)
- Write autobiographical narratives: (6W2.1)
 - a. Establish and develop a plot and setting and present a point of view that is appropriate to the story. (6W2.1a)
 - b. Include sensory details and concrete language to develop plot and character. (6W2.1b)
- Write expository compositions (e.g., description, explanation, comparison and contrast, problem and solution): (6W2.2)
 - a. State the thesis or purpose. (6W2.2a);
 - b. Explain the situation. (6W2.2b)
 - c. Follow an organizational pattern appropriate to the type of composition. (6W2.2c)
 - d. Offer persuasive evidence to validate arguments and conclusions as needed. (6W2.2d)
- Paraphrase text. (6WCV2.6)
- Write responses to literature. (6W2.4)
 - a. Develop an interpretation exhibiting careful reading, understanding, and insight. (6W2.4a)
 - b. Develop and justify the interpretation through sustained use of examples and textual evidence. (6W2.4c)
- Write research reports: (6W2.3)
 - a. Pose relevant questions with a scope narrow enough to be thoroughly covered. (6W2.3a)
 - b. Support the main idea or ideas with facts, details, examples, and explanations from multiple authoritative sources (e.g., speakers, periodicals, online information searches). (6W2.3b)
- Write persuasive compositions: (6W2.5)
 - a. State a clear position on a proposition or proposal. (6W2.5a)
 - b. Support the position with organized and relevant evidence. (6W2.5b)
 - c. Anticipate and address reader concerns and counter arguments. (6W2.5c)
 - d. Offer persuasive evidence to validate arguments and conclusions as needed. (6W2.2d)
- Present information clearly to meet the needs of the intended audience. (6WCV2.7)
- Identify conventional format for personal/business letters. (6WCV2.8)
- Listening and Speaking
- Deliver oral responses to literature: (6LS2.3)
 - a. Develop an interpretation exhibiting careful reading, understanding, and insight. (6LS2.3a)
 - b. Organize the selected interpretation around several clear ideas, premises, or images. (6LS2.3b)
 - c. Develop and justify the selected interpretation through sustained use of examples and textual evidence. (6LS2.3c)

Mathematics: Essential Standards

Number Sense

- Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line. (6NS1.1)
- Use proportions to solve problems (e.g., determine the value of N if $\frac{4}{7} = \frac{N}{21}$, find the length of a side of a polygon similar to a known polygon). (6SN1.3)
- Use cross-multiplication as a method for solving such problems, understanding it as the multiplication of both sides of an equation by a multiplicative inverse. (6NS1.3)
- Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips. (6NS1.4)
- Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation. (6NS2.1)
- Explain the meaning of multiplication and division of positive fractions and perform the calculations (e.g., $\frac{5}{8} \div \frac{15}{16} = \frac{5}{8} \times \frac{16}{15} = \frac{2}{3}$). (6NS2.2)
- Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, that use positive and negative integers and combinations of these operations. (6NS2.3)
- Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions (e.g., to find a common denominator to add two fractions or to find the reduced form for a fraction). (6NS2.4)

Algebra and Functions

- Write and solve one-step linear equations in one variable. (6AF1.1)
- Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process. (6AF1.3)
- Solve problems manually by using the correct order of operations or by using a scientific calculator. (6AF1.4)
- Use variables in expressions describing geometric quantities (e.g., $P = 2w + 2l$, $A = \frac{1}{2}bh$, $C = \pi d$ —the formulas for the perimeter of a rectangle, the area of a triangle, and the circumference of a circle, respectively). (6AF3.1)

Measurement and Geometry

- Understand the concept of a constant such as π ; know the formulas for the circumference and area of a circle. (6MG1.1)
- Know common estimates of pi (3.14; $\frac{22}{7}$) and use these values to estimate and calculate the circumference and the area of circles; compare with actual measurements. (6MG1.2)
- Identify angles as vertical, adjacent, complementary, or supplementary and provide descriptions of these terms. (6MG2.1)
- Use the properties of complementary and supplementary angles and the sum of the angles of a triangle to solve problems involving an unknown angle. (6MG2.2)

Statistics, Data Analysis, and Probability

- Compute the range, mean, median, and mode of data sets. (6SDP1.1)
- Understand how additional data added to data sets may affect these computations of measures of central tendency. (6SDP1.2)
- Know why a specific measure of central tendency (mean, median, mode) provides the most useful information in a given text. (6SDP1.4)
- Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims. (6SDP2.5)
- Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome. (6SDP3.1)
- Use data to estimate the probability of future events (e.g., batting averages or number of accidents per mile driven). (6SDP3.2)

- Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if P is the probability of an event, $1-P$ is the probability of an event not occurring. (6SDP3.3)
- Understand the difference between independent and dependent events. (6SDP3.5)

Mathematical Reasoning

- Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, sequencing and prioritizing information, and observing patterns. (6MR1.1)
- Determine when and how to break a problem into simpler parts. (6MR1.3)
- Use estimation to verify the reasonableness of calculated results. (6MR2.1)
- Apply strategies and results from simpler problems to more complex problems. (6MR2.2)
- Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning. (6MR2.5)
- Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work. (6MR2.6)
- Make precise calculations and check the validity of the results from the context of the problem. (6MR2.7)
- Evaluate the reasonableness of the solution in the context of the original situation. (6MR3.1)
- Develop generalizations of the results obtained and the strategies used and apply them in new problem situations. (6MR3.3)

Science: Essential Standards

Earth Science

Plate tectonics accounts for important features of Earth's surface and major geologic events. As a basis for understanding this concept: (6E1)

- a. Students know evidence of plate tectonics is derived from the fit of the continents; the location of earthquakes, volcanoes, and midocean ridges; and the distribution of fossils, rock types, and ancient climatic zones. (6E1a)
- b. Students know Earth is composed of several layers: a cold, brittle lithosphere; a hot, convecting mantle; and a dense, metallic core. (6E1b)
- c. Students know lithospheric plates the size of continents and oceans move at rates of centimeters per year in response to movements in the mantle. (6E1c)
- d. Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface. (6E1d)
- e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. (6E1e)
- f. Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics. (6E1f)
- g. Students know how to determine the epicenter of an earthquake and know that the effects of an earthquake on any region vary, depending on the size of the earthquake, the distance of the region from the epicenter, the local geology, and the type of construction in the region. (6E1g)

Physical Science

Heat moves in a predictable flow from warmer objects to cooler objects until all the objects are at the same temperature. As a basis for understanding this concept: (6P3)

- a. Students know energy can be carried from one place to another by heat flow or by waves, including water, light and sound waves, or by moving objects. (6P3a)
- b. Students know that when fuel is consumed, most of the energy released becomes heat energy. (6P3b)
- c. Students know heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and by convection (which involves flow of matter). (6P3c)
- d. Students know heat energy is also transferred between objects by radiation (radiation can travel through space). (6P3d)

Energy/Earth Science

Many phenomena on Earth's surface are affected by the transfer of energy through radiation and convection currents. As a basis for understanding this concept: (6E4)

- a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle. (6E4a)
- b. Students know convection currents distribute heat in the atmosphere and oceans. (6E4d)
- c. Students know differences in pressure, heat, air movement, and humidity result in changes of weather. (6E4e)

Life Science

Organisms in ecosystems exchange energy and nutrients among themselves and with the environment. As a basis for understanding this concept: (6L5)

- a. Students know energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis and then from organism to organism through food webs. (6L5a)
- b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment. (6L5b)
- c. Students know the number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures, and soil composition. (6L5e)

Investigation and Experimentation

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. (6I7)

- a. Students develop a hypothesis. (6I7a)
- b. Students select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. (6I7b)
- c. Students construct appropriate graphs from data and develop qualitative statements about the relationships between variables. (6I7c)
- d. Students communicate the steps and results from an investigation in written reports and oral presentations. (6I7d)
- e. Students recognize whether evidence is consistent with a proposed explanation. (6I7e)

History and Social Science

THEME: WORLD HISTORY & GEOGRAPHY: ANCIENT CIVILIZATIONS. Students in grade six expand their understanding of history by studying the people and events that ushered in the dawn of the major western and non-western ancient civilizations. Continued emphasis is placed on the everyday lives, problems, and accomplishments of people, their role in developing social, economic, and political structures, as well as in establishing and spreading ideas that helped transform the world forever. Specific cultures studied include Mesopotamia, Egypt, Kush, Hebrews, Greece and Rome.

Health and Physical Education

Students will participate in a comprehensive, sequential physical education program that promotes physical, mental, emotional and social well-being. Specific activities will promote skill development in the following areas: large and small motor development, balance, eye-hand coordination, eye-foot coordination, general coordination and creative movement. The health curriculum is designed to provide students with current health information, assist them to understand scientifically based principles of health promotion and disease prevention and to incorporate that knowledge into personal health related attitudes and behaviors.

Visual and Performing Arts

Students will experience activities in a program that emphasizes visual arts, music, dance and drama. They will learn to appreciate history, aesthetics and the creation of the arts through integration with other subject areas, guest artists, live performances, music and art specialists and attendance at special off campus activities that foster enthusiasm for the arts. They will learn audience appreciation skills and will have an opportunity to regularly practice them. A field trip to a museum is provided for all students.