

## 2008-2009 Fifth Grade Standards

For ELA standards:

The teacher should continue to address earlier indicators as they apply to more difficult texts. Instructional baseline expectations are not intended to be all-inclusive documents.

### READING: Understanding and Using Literary Texts

**Standard 5-1** The student will read and comprehend a variety of literary texts in print and nonprint formats.

Students in grade five read 4 major types of literary texts: **fiction**, **literary nonfiction**, **poetry**, and **drama**. In the category of **fiction**, they read the following specific types of texts: chapter books, adventure stories, historical fiction, contemporary realistic fiction, science fiction, picture books, folktales, legends, tall tales, and myths. In the category of **literary nonfiction**, they read personal essays, autobiographical and biographical sketches, and speeches. In the category of **poetry**, they read narrative poems, lyrical poems, humorous poems, and free verse.

- 5-1.1 Analyze literary texts to draw conclusions and make inferences.
- 5-1.2 Differentiate among the first-person, limited-omniscient (third person), and omniscient (third person) points of view.
- 5-1.3 Interpret devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration).
- 5-1.4 Analyze literary texts to distinguish between direct and indirect characterization.
- 5-1.5 Interpret the effect of the author's craft (for example, tone, figurative language, dialogue, and imagery) on the meaning of literary texts.
- 5-1.6 Analyze details that support the expression of the main idea in a given literary text.
- 5-1.7 Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts).
- 5-1.8 Analyze types of fiction (including legends and myths) and types of nonfiction (including speeches and personal essays) by characteristics.
- 5-1.9 Understand characteristics of poetry (inc. stanza, rhyme scheme, repetition, refrain).
- 5-1.10 Predict events in literary texts on the basis of cause-and-effect relationships.
- 5-1.11 Read independently for extended periods of time for pleasure.

### READING: Understanding and Using Informational Texts

**Standard 5-2** The student will read and comprehend a variety of informational texts in print and nonprint formats.

Students in grade five read **informational (expository/persuasive/argumentative) texts** of the following types: essays, historical documents, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, encyclopedia entries, reviews (for example, book, movie, product), journals, and speeches. They also read directions, maps, time lines, graphs, tables, charts, schedules, recipes, and photos embedded in informational texts. In addition, they examine commercials, documentaries, and other forms of **nonprint informational texts**.

- 5-2.1 Summarize the central idea and supporting evidence of a given informational text.
- 5-2.2 Analyze informational texts to draw conclusions and make inferences.
- 5-2.3 Analyze a given text to detect author bias (for example, unsupported opinions).

- 5-2.4 Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations).
- 5-2.5 Use titles, print styles, chapter headings, captions, subheadings, and white space to gain information.
- 5-2.6 Use graphic features (including illustrations, graphs, charts, maps, diagrams, and graphic organizers) as sources of information.
- 5-2.7 Use functional text features (including tables of contents, glossaries, indexes, and appendixes).
- 5-2.8 Predict events in informational texts on the basis of cause-and-effect relationships.
- 5-2.9 Read independently for extended periods of time to gain information.

**READING: Building Vocabulary**

**Standard 5-3** The student will use word analysis and vocabulary strategies to read fluently.

- 5-3.1 Use context clues (for example, those that provide an example, a definition, or a restatement) to generate the meanings of unfamiliar and multiple-meaning words.
- 5-3.2 Use base words and affixes to determine the meanings of words within texts.

baseline expectations: <b>Grade 5</b> <i>Analyze the meanings of words using Greek and Latin roots and affixes within texts.</i>	
<b>Prefixes</b>	co-, en-, em-, extra-, inter-, mis- semi-,
<b>Greek and Latin Roots</b>	G: geo, human, hydro, meter, port, sphere L: aqua, audi, dict, fac/fec/fic, spec/spect, terra, tri
<b>Suffixes</b>	-age, -ate, -ation, -ous, -tion/-sion, -ual

**Grade 5 Greek and Latin Roots and Affixes Matrix**

Prefixes	Roots		Suffixes
	Greek	Latin	
extra- (beyond)	geo (earth)	aqua (water)	-ation (n)
inter- (between)	human (man)	audi (hear)	-ous (adj)
semi- (half)	hydro (water)	dict (speak)	-tion/-sion (n)
co- (together)	meter (measure)	fac/fec/fic (make; do)	-age (n)
en-.em- (into/onto)	port (carry)	spec/spect (look)	-ate (v)
mis- (bad/wrong)	sphere (round)	terra (earth)	-ual (adj)
		tri (three)	

5-3.3 Interpret the meaning of idioms and euphemisms encountered in texts.

5-3.4 Spell correctly

multisyllabic constructions	double consonant patterns	irregular vowel patterns in multisyllabic words
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## WRITING: Developing Written Communications

**Standard 5-4** The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of voice, and correct use of the conventions of written Standard American English.

- 5-4.1 Generate and organize ideas for writing using prewriting techniques (for example, creating lists, having discussions, and examining literary models).
- 5-4.2 Use complete sentences in a variety of types (including simple, compound, and complex) in writing.
- 5-4.3 Create multiple-paragraph compositions that include a central idea with supporting details and use appropriate transitions between paragraphs.
- 5-4.4 Use grammatical conventions of written Standard American English including
  - irregular comparative and superlative adjectives,
  - irregular adverbs,
  - interjections,
  - past participles of commonly misused verbs, and
  - subject-verb and pronoun-antecedent agreement with collective nouns.

### *Composite Writing Matrix*

Grade Level	Conventions of Grammar	Mechanics of Editing	Revision and Organizational Strategies	Writing Products (Examples)
5	<ul style="list-style-type: none"> <li>• irregular comparative and superlative adjectives</li> <li>• irregular adverbs</li> <li>• interjections</li> <li>• past participles of commonly misused verbs</li> <li>• subject-verb and pronoun-antecedent agreement with collective nouns</li> </ul>	Capitalization <ul style="list-style-type: none"> <li>• ethnic groups</li> <li>• national groups</li> <li>• established religions and languages</li> </ul> Punctuation <ul style="list-style-type: none"> <li>• colons</li> <li>• hyphens</li> </ul> Spelling <ul style="list-style-type: none"> <li>• commonly confused words</li> <li>• multisyllabic constructions</li> <li>• double consonant patterns</li> <li>• irregular vowel patterns in multisyllabic words</li> </ul>	<ul style="list-style-type: none"> <li>• word choice</li> <li>• organization and development of ideas and voice</li> <li>• use of simple, compound, and complex sentences</li> <li>• multiple-paragraph compositions that include a central idea with supporting details with appropriate transitions</li> </ul>	Narrative writing that includes <ul style="list-style-type: none"> <li>• fully developed plot</li> <li>• consistent point of view</li> </ul> Descriptive writing that uses <ul style="list-style-type: none"> <li>• precise language</li> <li>• vivid details</li> </ul> Writing to entertain <ul style="list-style-type: none"> <li>• picture books</li> <li>• comic books</li> <li>• graphic novels</li> </ul> Writing to inform <ul style="list-style-type: none"> <li>• book reviews</li> <li>• newsletter articles</li> </ul>

- 5-4.5 Use revision strategies to improve the organization and development of content and the quality of voice in written works
- 5-4.6 Edit for the correct use of written Standard American English including
- capitalization
    - ethnic groups
    - national groups
    - established religions and languages
  - punctuation
    - colons
    - hyphens
  - spelling
    - commonly confused words
    - multisyllabic constructions
    - double consonant patterns
    - irregular vowel patterns in multisyllabic words

### **WRITING: Producing Written Communications in a Variety of Forms**

**Standard 5-5** The student will write for a variety of purposes and audiences.

- 5-5.1 Create informational pieces (for example, book reviews and newsletter articles) that use language appropriate for the specific audience.
- 5-5.2 Create narratives that have a fully developed plot and a consistent point of view.
- 5-5.3 Create written descriptions using precise language and vivid details.
- 5-5.4 Create written pieces (for example, picture books, comic books, and graphic novels) to entertain a specific audience.

### **RESEARCHING: Applying the Skills of Inquiry and Oral Communication**

**Standard 5-6** The student will access and use information from a variety of sources.

- 5-6.1 Clarify and refine a research topic.
- 5-6.2 Use print sources (for example, books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, and almanacs) and nonprint sources to access information.
- 5-6.3 Select information appropriate for the research topic.
- 5-6.4 Paraphrase research information accurately and meaningfully.
- 5-6.5 Create a list of sources that contains information (including author, title, and full publication details) necessary to properly credit and document the work of others.
- 5-6.6 Use the Internet as a source of information.
- 5-6.7 Use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose.
- 5-6.8 Use appropriate organizational strategies to prepare written works and oral and visual presentations.
- 5-6.9 Select appropriate graphics, in print or electronic form, to support written works and oral and visual presentations.

## Greenville County Schools Writing Program for Fourth Grade

<p><b>Personal Writing</b></p> <ul style="list-style-type: none"> <li>• Journals</li> <li>Response</li> <li>Learning Log</li> <li>Writer's Handbook</li> <li>• Memoir*</li> <li>• Writing History/ Recording Oral History</li> </ul> <p><b>Real World Application</b></p> <ul style="list-style-type: none"> <li>• Business Letter</li> <li>• Friendly Letter</li> <li>• Note taking</li> <li>• Directions (multiple paragraphs)</li> </ul> <p><b>Research</b></p> <ul style="list-style-type: none"> <li>• Research Project* 3 sources Bibliography (Author, Title, Publisher, Co.) Power Point Digital Pictures Presentation Word Processing</li> </ul> <p><b>Literary Models</b></p> <ul style="list-style-type: none"> <li>• Trickster Tales</li> <li>• Picture Books</li> <li>• Graphic Novels</li> <li>• Comic Books</li> <li>• Book Reviews</li> <li>• Character Sketch</li> <li>• Summaries</li> <li>• Poetry Acrostic (Words wrap from letter to letter to form sentence) Haiku Diamante, Cinquain Free Verse, Bio-poem Limericks, Concrete</li> </ul> <p><b>Essay*</b></p> <p style="padding-left: 20px;">"Newsletter Article"</p>	<p style="text-align: center;"><b>The Five Cycles of Writing Instruction</b></p> <hr/> <p><b>Cycle 1: Self-selected Writing</b></p> <p>Students will self-select a topic. Students are willing to write. Students share their writing with their peers.</p> <hr/> <p><b>Cycle 2: Process Writing</b> (Prewriting, Drafting, Editing, and Publishing)</p> <p>Students will self-select topics. Students will plan their writing. Students will draft, edit, conference, and publish.</p> <hr/> <p><b>Cycle 3: Process Writing</b> (Prewriting, Drafting, Revising, Editing, and Publishing)</p> <p>Students will self-select topics. Students will plan their writing. Students will draft, revise, edit, conference, and publish.</p> <hr/> <p><b>Cycle 4: Process Writing Specific Genres</b> (Prewriting, Drafting, Revising, Editing and Publishing)</p> <p>Students will self-select or will be given a topic. Students will plan for a specific genre. Students will draft, revise, edit, conference, and publish.</p> <hr/> <p><b>Cycle 5: Single Draft Focused Writing</b> (Teaching students how to address a prompt)</p> <p style="text-align: center;"><u><b>Prewriting Phase</b></u></p> <p><b>Step 1:</b> Teacher or review background knowledge for the prompt. <b>Step 2:</b> Present prompt and answer students' questions about it. <b>Step 3:</b> Have students engage in inquiry or research. <i>(Optional)</i> <b>Step 4:</b> Have students individually plan their writing.</p> <p style="text-align: center;"><u><b>Writing Phase</b></u></p> <p><b>Step 5:</b> Have students write first drafts.</p> <p style="text-align: center;"><u><b>Sharing Phase (Optional)</b></u></p> <p><b>Step 6:</b> Have each student share her first draft with at least one other student.</p>
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## Mathematical Processes

**Standard 5-1:** The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

- 5-1.1 Analyze information to solve increasingly more sophisticated problems.
- 5-1.2 Construct arguments that lead to conclusions about general mathematical properties and relationships.
- 5-1.3 Explain & justify answers based on mathematical properties, structures, & relationships.
- 5-1.4 Generate descriptions and mathematical statements about relationships between and among classes of objects.
- 5-1.5 Use correct, clear, and complete oral and written mathematical language to pose questions, communicate ideas, and extend problem situations.
- 5-1.6 Generalize connections between new mathematical ideas and related concepts and subjects that have been previously considered.
- 5-1.7 Use flexibility in mathematical representations.
- 5-1.8 Recognize the limitations of various forms of mathematical representations.

## Number and Operations

**Standard 5-2:** The student will demonstrate through the mathematical processes an understanding of the place value system; the division of whole numbers; the addition and subtraction of decimals; the relationships among whole numbers, fractions, and decimals; and accurate, efficient, and generalizable methods of adding and subtracting fractions.

- 5-2.1 Analyze the magnitude of a digit on the basis of its place value, using whole numbers and decimal numbers through thousandths.
- 5-2.2 Apply an algorithm to divide whole numbers fluently.
- 5-2.3 Understand the relationship among the divisor, dividend, and quotient.
- 5-2.4 Compare whole numbers, decimals, and fractions by using the symbols  $<$ ,  $>$ , and  $=$ .
- 5-2.5 Apply an algorithm to add and subtract decimals through thousandths.
- 5-2.6 Classify numbers as prime, composite, or neither.
- 5-2.7 Generate strategies to find the greatest common factor and the least common multiple of two whole numbers.
- 5-2.8 Generate strategies to add and subtract fractions with like & unlike denominators.
- 5-2.9 Apply divisibility rules for 3, 6, and 9.

## Algebra

**Standard 5-3:** The student will demonstrate through the mathematical processes an understanding of the use of patterns, relations, functions, models, structures, and algebraic symbols to represent quantitative relationships and will analyze change in various contexts.

- 5-3.1 Represent numeric, algebraic, and geometric patterns in words, symbols, algebraic expressions, and algebraic equations.
- 5-3.2 Analyze patterns and functions with words, tables, and graphs.
- 5-3.3 Match tables, graphs, expressions, equations, and verbal descriptions of the same problem situation.
- 5-3.4 Identify applications of commutative, associative, and distributive properties with whole numbers.
- 5-3.5 Analyze situations that show change over time.

## Geometry

**Standard 5-4:** The student will demonstrate through the mathematical processes an understanding of congruency, spatial relationships, and relationships among the properties of quadrilaterals.

- 5-4.1 Apply relationships of quadrilaterals to make logical arguments about their properties.
- 5-4.2 Compare the angles, side lengths, and perimeters of congruent shapes.
- 5-4.3 Classify shapes as congruent.
- 5-4.4 Translate between two-dimensional representations and three-dimensional objects.
- 5-4.5 Predict the results of multiple transformations on a geometric shape when combinations of translation, reflection, and rotation are used.
- 5-4.6 Analyze shapes to determine line symmetry and/or rotational symmetry.

## Measurement

**Standard 5-5:** The student will demonstrate through the mathematical processes an understanding of the units and systems of measurement and the application of tools and formulas to determine measurements.

- 5-5.1 Use appropriate tools and units to measure objects to the precision of one-eighth inch.
- 5-5.2 Use a protractor to measure angles from 0 to 180 degrees.
- 5-5.3 Use equivalencies to convert units of measure within the metric system: converting length in millimeters, centimeters, meters, and kilometers; converting liquid volume in milliliters, centiliters, liters, and kiloliters; and converting mass in milligrams, centigrams, grams, and kilograms.
- 5-5.4 Apply formulas to determine perimeters & areas of triangles, rectangles, & parallelograms.
- 5-5.5 Apply strategies and formulas to determine the volume of rectangular prisms.
- 5-5.6 Apply procedures to determine the amount of elapsed time in hours, minutes, and seconds within a 24-hour period.
- 5-5.7 Understand the relationship between the Celsius and Fahrenheit temperature scales.
- 5-5.8 Recall equivalencies associated with length, liquid volume, and mass:  
10 millimeters = 1 centimeter, 100 centimeters = 1 meter, 1000 meters = 1 kilometer;  
10 milliliters = 1 centiliter, 100 centiliters = 1 liter, 1000 liters = 1 kiloliter; and  
10 milligrams = 1 centigram, 100 centigrams = 1 gram, 1000 grams = 1 kilogram.

## Data Analysis and Probability

**Standard 5-6:** The student will demonstrate through the mathematical processes an understanding of investigation design, the effect of data-collection methods on a data set, the interpretation and application of the measures of central tendency, and the application of basic concepts of probability.

- 5-6.1 Design a mathematical investigation to address a question.
- 5-6.2 Analyze how data-collection methods affect the nature of the data set.
- 5-6.3 Apply procedures to calculate the measures of central tendency (mean, median, and mode).
- 5-6.4 Interpret the meaning and application of the measures of central tendency.
- 5-6.5 Represent the probability of a single-stage event in words and fractions.
- 5-6.6 Conclude why the sum of the probabilities of the outcomes of an experiment must equal 1.

## United States Studies: 1865 to the Present

H= history   G= geography   P = political science/government   E = economics

**Standard 5-1:** The student will demonstrate an understanding of Reconstruction and its impact on racial relations in the United States.

- 5-1.1 Summarize the aims of Reconstruction and explain the effects of Abraham Lincoln's assassination on the course of Reconstruction. (P, H, E)
- 5-1.2 Summarize the provisions of Thirteenth, Fourteenth, & Fifteenth Amendments to the Constitution, including how the amendments protected the rights of African Americans and sought to enhance their political, social, and economic opportunities. (P, E, H)
- 5-1.3 Explain the effects of Reconstruction on African Americans, including their new rights and restrictions, their motivations to relocate to the North and the West, and the actions of the Freedmen's Bureau. (P, G, E, H)
- 5-1.4 Compare the economic and social effects of Reconstruction on different populations, including the move from farms to factories and the change from the plantation system to sharecropping. (E, P)
- 5-1.5 Explain the purpose and motivations behind the rise of discriminatory laws and groups and their effect on the rights and opportunities of African Americans in different regions of the United States. (P, G, E, H)

**Standard 5-2:** The student will demonstrate an understanding of the continued westward expansion of the United States.

- 5-2.1 Explain how aspects of the natural environment—including the principal mountain ranges and rivers, terrain, vegetation, and climate of the region—affected travel to the West and thus the settlement of that region. (G, H)
- 5-2.2 Illustrate the effects of settlement on the environment of the West, including changes in the physical and human systems. (G)
- 5-2.3 Summarize how railroads affected development of the West, including their ease and inexpensiveness for travelers & their impact on trade & natural environment. (G, E, H)
- 5-2.4 Provide examples of conflict and cooperation between occupational and ethnic groups in the West, including miners, ranchers, and cowboys; Native Americans and Mexican Americans; and European and Asian immigrants. (E, H)
- 5-2.5 Explain the social and economic effects of the westward expansion on Native Americans, including changes in federal policies, armed conflicts, opposing views concerning land ownership, and Native American displacement. (P, G, E, H)

**Standard 5-3:** The student will demonstrate an understanding of major domestic and foreign developments that contributed to the United States' becoming a world power.

- 5-3.1 Explain how the Industrial Revolution was furthered by new inventions and technologies, including new methods of mass production and transportation and the invention of the light bulb, the telegraph, and the telephone. (E, H)
- 5-3.2 Identify prominent inventors and scientists of the period and summarize their inventions or discoveries, including Thomas Edison, Alexander Graham Bell, the Wright Brothers, and Albert Einstein. (H)

- 5-3.3 Explain the effects of immigration and urbanization on the American economy during the Industrial Revolution, including the role of immigrants in the work force and the growth of cities, the shift from an agrarian to an industrial economy, and the rise of big business. (P, G, E, H)
- 5-3.4 Summarize the significance of large-scale immigration and the contributions of immigrants to America in the early 1900s, including the countries from which they came, the opportunities and resistance they faced when they arrived, and the cultural and economic contributions they made to this nation. (P, G, E, H)
- 5-3.5 Explain how building cities and industries led to progressive reforms, including labor reforms, business reforms, and Prohibition. (P, G, E, H)
- 5-3.6 Summarize actions by the US that contributed to the rise of this nation as a world power, including the annexation of new territory following the Spanish-American War and the role played by the US in the building of Panama Canal & in World War I. (P, G, H)

**Standard 5-4:** The student will demonstrate an understanding of the economic boom-and-bust in America in the 1920s and 1930s, its resultant political instability, and the subsequent worldwide response.

- 5-4.1 Summarize changes in daily life in the boom period of the 1920s, including the improved standard of living; the popularity of new technology such as automobiles, airplanes, radio, and movies; the Harlem Renaissance and the Great Migration; Prohibition; and racial and ethnic conflict. (P, E, H)
- 5-4.2 Summarize the stock market crash of 1929 and the Great Depression, including economic weakness, unemployment, failed banks & businesses, and migration from rural areas. (P, G, E, H)
- 5-4.3 Explain the immediate and lasting effect on American workers caused by innovations of the New Deal, including the Social Security Act, the Federal Deposit Insurance Corporation, and the Civilian Conservation Corps. (P, E, H)
- 5-4.4 Explain the principal events related to the United States' involvement in World War II—including the bombing of Pearl Harbor, the invasion in Normandy, Pacific island hopping, bombing of Hiroshima and Nagasaki—and the role of key figures in this involvement such as Winston Churchill, Franklin D. Roosevelt, Joseph Stalin, and Adolf Hitler. (P, G, H)
- 5-4.5 Summarize the political and social impact of World War II, including changes in women's roles, in attitudes toward Japanese Americans, and in nation-state boundaries and governments. (P, E, H)
- 5-4.6 Summarize key developments in technology, aviation, weaponry, and communication and explain their effect on World War II and the economy of the United States. (P, E, H)
- 5-4.7 Explain the effects of increasing worldwide economic interdependence following World War II, including how interdependence between and among nations and regions affected economic productivity, politics, and world trade. (P, G, E, H)

**Standard 5-5:** The student will demonstrate an understanding of the social, economic, and political events that influenced the United States during the Cold War era.

- 5-5.1 Summarize the impact of cultural developments in the United States following World War II, including the significance of pop culture and mass media and the population shifts to the suburbs. (G, H)
- 5-5.2 Summarize changes in the United States economy following World War II, including the expanding job market and service industry, consumerism, and new technology. (E, P, H)
- 5-5.3 Explain the advancement of the civil rights movement in the United States, including key events and people: desegregation of the armed forces, *Brown v. Board of Education*, Martin Luther King Jr., Rosa Parks, and Malcolm X. (P, G, H)
- 5-5.4 Explain the course of the Cold War, including differing economic and political philosophies of the Union of Soviet Socialist Republics (USSR) and the United States, the spread of Communism, McCarthyism, the Korean Conflict, the Berlin Wall, the space race, the Cuban missile crisis, and the Vietnam War. (P, G, E, H)
- 5-5.5 Explain the political alliances and policies that impacted the United States in the latter part of the twentieth century, including the North Atlantic Treaty Organization (NATO), the United Nations, and the Organization of Petroleum Exporting Countries (OPEC). (P, H, E, G)

**Standard 5-6:** The student will demonstrate an understanding of developments in the United States since the fall of the Soviet Union and its satellite states in 1992.

- 5-6.1 Use a map to identify the regions of United States political involvement since the fall of the communist states, including places in the Middle East, Central America, the Caribbean, Africa, the Balkans in Europe, and Asia. (P, G, H)
- 5-6.2 Explain how humans change the physical environment of regions and the consequences of such changes, including use of natural resources and the expansion of transportation systems. (P, G, E)
- 5-6.3 Explain how technological innovations have changed daily life in the US since the early 1990s, including changes in economy & the culture that were brought about by computers, electronics, satellites, & mass communication systems. (E, H)
- 5-6.4 Identify examples of cultural exchange between the United States and other countries that illustrate the importance of popular culture and the influence of American popular culture in other places in the world, including music, fashion, food, and movies. (G, H)
- 5-6.5 Summarize the changes that have taken place in US foreign policy since 1992, including the globalization of trade and the war on terrorism. (P, H, G, E)
- 5-6.6 Compare the position of the United States on the world stage following World War I, World War II, and the collapse of the communist states. (P, H)

**Social Studies Standards Glossary**

balance of payments	The total flow of money into a country minus the total flow of money out of a country.
balance of trade	The level of merchandise exported minus the level of merchandise imported.
barter	The direct trade of goods or services.

Bill of Rights	The first ten amendments to the United States Constitution.
capital	Wealth in form of money or property owned, used, or accumulated in business by an individual, partnership, or corporation; any form of material wealth used in production of more wealth.
citizen	Member of political society who has obligations to and is entitled to protection by and from government.
citizenship	The status of being a member of a state; quality of the individual's response to the state as one who owes allegiance to it and is entitled to its protection and to the political rights it upholds.
community	A group of people living in the same locality under the same government.
comparative advantage	The principle that a country benefits from specializing in the production of the commodity that it is most efficient at producing.
confederal system	Alliance of independent states manifesting a degree of national unity through a central government of united powers (e.g., US under the Articles of Confederation, the Commonwealth of Independent States).
consumer price index	A number used to calculate changes in the average level of prices for a number of items typically bought by urban families.
corporation	An organization created by legal charter to conduct some type of business.
culture	Learned behavior of people, which includes their languages, belief systems, social relationships, institutions, and organizations as well as their material goods.
demand	Quantities of a good that consumers are willing and able to purchase at various prices during a given period of time.
democracy	A form of government in which political control is exercised by all the people, either directly or indirectly through their elected representatives.
depression	A prolonged and severe decline in the level of economic activity.
developing nation	Area of world that is changing from uneven growth to more constant economic conditions and is generally characterized by low rates of urbanization and relatively high rates of infant mortality and illiteracy.
diffusion	The spread of people, ideas, technology, & products throughout a number of places.
distribution	The arrangement of items over a specified area.
diversity	The variety of experiences and perspectives that arise from differences in race, culture, religion, mental or physical abilities, heritage, age, gender, and other characteristics.
due process of law	The right of every citizen to be protected against arbitrary action by government.
economics	Social science that deals with way society allocates scarce resources among its unlimited wants & needs.

entrepreneur	An individual who assumes the risk in producing a product for a profit.
entrepreneurship	The managerial ability and risk-taking that contribute to a productive society.
environment	Everything surrounding one (e.g., the Earth's environment includes everything in and on the Earth's surface and its atmosphere within which organisms, communities, and objects exist).
federal system (federalism)	The form of political organization in which power is divided among a central government and territorial subdivisions—in the US, among the national, state, and local governments.
foreign policy	Guidelines of a government directed to matters beyond its borders, especially regarding relations with other nation-states.
government	Institutions and procedures through which a territory is administered.
gross domestic product	The total dollar value of all goods and services produced by resources located in the United States during one year's time.
industrialization	Growth of machine production and factory system; process of introducing manufacturing into countries or regions where most people are engaged in primary economic activities.
inflation	A rise in the average level of prices.
institution (political)	Custom, practice (e.g., the institution of slavery), organization (e.g., Congress), relationship, or behavioral pattern of importance in life of a community or larger society.
interdependence	The condition in which people rely on each other for ideas, goods, and services.
interest	The price one pays for the use of someone else's money.
justice	The upholding of what is just—especially, fair treatment and due reward in accordance with honor, standards of equity and morality, or the law.
law of demand	The quantity demanded of a good will be greater at a lower price than the quantity demanded of the same good at a higher price.
law of supply	The quantity of a good supplied will be greater at a higher price than it will at a lower price.
map	Graphic representation of a portion of Earth that is usually drawn to scale on a flat surface.
market	Exchange activities between buyers and sellers of goods and services.
market economy	System of commercial enterprise in which decisions are made on basis of current trade factors.
migration	The act or process of people's moving from one place to another with the intent of staying at the destination permanently or for a relatively long period of time.
monarchy	The form of government in which political power is exercised by a single ruler under the claim of divine or hereditary right.

nation-state	Political unit that claims sovereignty over defined territory and jurisdiction over everyone in it.
opportunity cost	The value of any alternative that one must give up when one makes a choice.
places	Locations having distinctive characteristics that give them meaning and character and distinguish them from other locations.
population density	The calculation of the number of individuals occupying an area derived from dividing the number of people by the area they occupy.
price index	A number that compares prices in one year with those of some earlier base year.
quota	A predetermined limited quantity; in economics, a limit on the amount of imports or exports.
region	An area with one or more common characteristics or features that give it a measure of homogeneity and make it different from surrounding areas.
representative government	The form of government in which power is held by the people and exercised indirectly through elected representatives who make decisions.
resources	Aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value.
rule of law	The principle that every member of a society, even a ruler, must follow the law.
sovereignty	Ultimate, supreme power in a state; in the US, sovereignty rests with the people.
technology	Application of knowledge to meet goals & to supply goods & services needed & desired by people.
totalitarianism	A form of authoritarianism in which the government attempts to control every aspect of the lives of individuals and prohibits independent associations.
unitary government	A system of government in which all authority is vested in a central government from which regional and local governments derive their powers.
urbanization	A process through which a geographical area is transformed from a rural to an urban environment as the result of an increase in numbers of people who live & work there.

## Scientific Inquiry

**Standard 5-1:** The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and mathematical thinking necessary to conduct a controlled scientific investigation.

- 5-1.1 Identify questions suitable for generating a hypothesis.
- 5-1.2 Identify independent (manipulated), dependent (responding), and controlled variables in an experiment.
- 5-1.3 Plan and conduct controlled scientific investigations, manipulating one variable at a time.
- 5-1.4 Use appropriate tools and instruments (including a timing device and a 10x magnifier) safely and accurately when conducting a controlled scientific investigation.
- 5-1.5 Construct a line graph from recorded data with correct placement of independent (manipulated) and dependent (responding) variables.
- 5-1.6 Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form.
- 5-1.7 Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings.
- 5-1.8 Use appropriate safety procedures when conducting investigations.

## Ecosystems: Terrestrial and Aquatic

**Standard 5-2:** The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)

- 5-2.1 Recall the cell as the smallest unit of life and identify its major structures (including cell membrane, cytoplasm, nucleus, and vacuole).
- 5-2.2 Summarize the composition of an ecosystem, considering both biotic factors (including populations to the level of microorganisms and communities) and abiotic factors.
- 5-2.3 Compare the characteristics of different ecosystems (including estuaries/salt marshes, oceans, lakes and ponds, forests, and grasslands).
- 5-2.4 Identify the roles of organisms as they interact and depend on one another through food chains and food webs in an ecosystem, considering producers and consumers (herbivores, carnivores, and omnivores), decomposers (microorganisms, termites, worms, and fungi), predators and prey, and parasites and hosts.
- 5-2.5 Explain how limiting factors (including food, water, space, and shelter) affect populations in ecosystems.

## Landforms and Oceans

**Standard 5-3:** The student will demonstrate an understanding of features, processes, and changes in Earth's land and oceans. (Earth Science)

- 5-3.1 Explain how natural processes (including weathering, erosion, deposition, landslides, volcanic eruptions, earthquakes, and floods) affect Earth's oceans and land in constructive and destructive ways.
- 5-3.2 Illustrate the geologic landforms of the ocean floor (including the continental shelf and slope, the mid-ocean ridge, rift zone, trench, and the ocean basin).
- 5-3.3 Compare continental and oceanic landforms.
- 5-3.4 Explain how waves, currents, tides, and storms affect the geologic features of the ocean shore zone (including beaches, barrier islands, estuaries, and inlets).

- 5-3.5 Compare the movement of water by waves, currents, and tides.
- 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.

### **Properties of Matter**

**Standard 5-4:** The student will demonstrate an understanding of properties of matter.  
(Physical Science)

- 5-4.1 Recall that matter is made up of particles too small to be seen.
- 5-4.2 Compare the physical properties of the states of matter (including volume, shape, and the movement and spacing of particles).
- 5-4.3 Summarize the characteristics of a mixture, recognizing a solution as a kind of mixture.
- 5-4.4 Use the processes of filtration, sifting, magnetic attraction, evaporation, chromatography, and floatation to separate mixtures.
- 5-4.5 Explain how the solute and the solvent in a solution determine the concentration.
- 5-4.6 Explain how temperature change, particle size, and stirring affect the rate of dissolving.
- 5-4.7 Illustrate the fact that when some substances are mixed together, they chemically combine to form a new substance that cannot easily be separated.
- 5-4.8 Explain how the mixing and dissolving of foreign substances is related to the pollution of the water, air, and soil.

### **Forces and Motion**

**Standard 5-5:** The student will demonstrate an understanding of the nature of force and motion. (Physical Science)

- 5-5.1 Illustrate the affects of force (including magnetism, gravity, and friction) on motion.
- 5-5.2 Summarize the motion of an object in terms of position, direction, and speed.
- 5-5.3 Explain how unbalanced forces affect the rate and direction of motion in objects.
- 5-5.4 Explain ways to change the effect that friction has on the motion of objects (including changing the texture of the surfaces, changing the amount of surface area involved, and adding lubrication).
- 5-5.5 Use a graph to illustrate the motion of an object.
- 5-5.6 Explain how a change of force or a change in mass affects the motion of an object.

**Observe** – to watch, pay attention to, to notice, to use one or more of the senses to learn a fact, NOT an interpretation or an explanation

**Communicate** – to share or exchange information from one person to another, explain information using drawings, tables, graphs, and written or oral language

**Classify** – to put into groups with common properties:

1. Compare to find likenesses and differences
2. Organize common characteristics
3. Group
4. Label

**Experiment** – a test made to find out something, an activity that can be done (inquiry) to test a prediction

**Measure** – to find the size, amount, or weight of something using standard and/or nonstandard units, measurements are quantitative (number is involved)

**Predict** – to make a guess about what you think will happen, an educated guess about what will happen in the future