

7th Grade Critical Standards English Language Arts

1 & 10) Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. [RL and RI.7.1]

4 & 13.) Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. [RL.7.4]

7.) Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film). [RL.7.7]

18.) Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts. [RI.7.9]

20.) Write arguments to support claims with clear reasons and relevant evidence. [W.7.1]

a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. [W.7.1a]

b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. [W.7.1b]

c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. [W.7.1c]

d. Establish and maintain a formal style. [W.7.1d]

e. Provide a concluding statement or section that follows from and supports the argument presented. [W.7.1e]

23.) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 20-22 above.) [W.7.4]

27.) Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. [W.7.8]

30.) Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *Grade 7 topics, texts, and issues*, building on others' ideas and expressing their own clearly. [SL.7.1]

a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. [SL.7.1a]

b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. [SL.7.1b]

c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. [SL.7.1c]

d. Acknowledge new information expressed by others and, when warranted, modify their own views. [SL.7.1d]

33.) Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. [SL.7.4]

36.) Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. [L.7.1]

a. Demonstrate knowledge of subject-verb agreement when interrupted by a prepositional phrase, with inverted word order, with indefinite pronouns as subjects, compound subjects joined by correlative and coordinating conjunctions, and collective nouns when verb form depends on the rest of the sentence. (Alabama)

b. Explain the function of phrases and clauses in general and their function in specific sentences. [L.7.1a]

c. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. [L.7.1b]

d. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.* [L.7.1c]

37.) Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. [L.7.2]

a. Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie* but not *He wore an old[,] green shirt*). [L.7.2a]

b. Spell correctly. [L.7.2b]

7th Grade Critical Standards Mathematics

1.) Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. [7-RP1]

2.) Recognize and represent proportional relationships between quantities. [7-RP2]

a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. [7-RP2a]

b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. [7-RP2b]

c. Represent proportional relationships by equations. [7-RP2c]

Example: If total cost t is proportional to the number n of items purchased at a constant price p , the relationship between the total cost and the number of items can be expressed as $t = pn$.

d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate. [7-RP2d]

3.) Use proportional relationships to solve multistep ratio and percent problems. [7-RP3]

Examples: Sample problems may involve simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error.

4.) Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. [7-NS1]

a. Describe situations in which opposite quantities combine to make 0. [7-NS1a]

Example: A hydrogen atom has 0 charge because its two constituents are oppositely charged.

b. Understand $p + q$ as the number located a distance $|q|$ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. [7-NS1b]

c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. [7-NS1c]

d. Apply properties of operations as strategies to add and subtract rational numbers. [7-NS1d]

5.) Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. [7-NS2]

a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. [7-NS2a]

b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with nonzero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts. [7-NS2b]

c. Apply properties of operations as strategies to multiply and divide rational numbers. [7-NS2c]

d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats. [7-NS2d]

6.) Solve real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions.) [7-NS3]

7.) Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. [7-EE1]

8.) Understand that rewriting an expression in different forms in a problem context can shed light on the problem, and how the quantities in it are related. [7-EE2]

Example: $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."

9.) Solve multistep real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form, convert between forms as appropriate, and assess the reasonableness of answers using mental computation and estimation strategies. [7-EE3]

Examples: If a woman making \$25 an hour gets a 10% raise, she will make an additional $1/10$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\ 3/4$ inches long in the center of a door that is $27\ 1/2$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

10.) Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. [7-EE4]

a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. [7-EE4a]

Example: The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?

b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality, and interpret it in the context of the problem. [7-EE4b]

Example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.

7th Grade Critical Standards Science (Life)

3.) Construct an explanation of the function (e.g., mitochondria releasing energy during cellular respiration) of specific cell structures (i.e., nucleus, cell membrane, cell wall, ribosomes, mitochondria, chloroplasts, and vacuoles) for maintaining a stable environment.

4.) Construct models and representations of organ systems (e.g., circulatory, digestive, respiratory, muscular, skeletal, nervous) to demonstrate how multiple interacting organs and systems work together to accomplish specific functions.

5.) Examine the cycling of matter between abiotic and biotic parts of ecosystems to explain the flow of energy and the conservation of matter.

a. Obtain, evaluate, and communicate information about how food is broken down through chemical reactions to create new molecules that support growth and/or release energy as it moves through an organism.

b. Generate a scientific explanation based on evidence for the role of photosynthesis and cellular respiration in the cycling of matter and flow of energy into and out of organisms.

6.) Analyze and interpret data to provide evidence regarding how resource availability impacts individual organisms as well as populations of organisms within an ecosystem.

8.) Construct an explanation to predict patterns of interactions in different ecosystems in terms of the relationships between and among organisms (e.g., competition, predation, mutualism, commensalism, parasitism).

10.) Use evidence and scientific reasoning to explain how characteristic animal behaviors (e.g., building nests to protect young from cold, herding to protect young from predators, attracting mates for breeding by producing special sounds and displaying colorful plumage, transferring pollen or seeds to create conditions for seed germination and growth) and specialized plant structures (e.g., flower brightness, nectar, and odor attracting birds that transfer pollen; hard outer shells on seeds providing protection prior to germination) affect the probability of successful reproduction of both animals and plants.

12.) Construct and use models (e.g., monohybrid crosses using Punnett squares, diagrams, simulations) to explain that genetic variations between parent and offspring (e.g., different alleles, mutations) occur as a result of genetic differences in randomly inherited genes located on chromosomes and that additional variations may arise from alteration of genetic information.

13.) Construct an explanation from evidence to describe how genetic mutations result in harmful, beneficial, or neutral effects to the structure and function of an organism.

16.) Construct an explanation based on evidence (e.g., cladogram, phylogenetic tree) for the anatomical similarities and differences among modern organisms and between modern and fossil organisms, including living fossils (e.g., alligator, horseshoe crab, nautilus, coelacanth).

18.) Construct an explanation from evidence that natural selection acting over generations may lead to the predominance of certain traits that support successful survival and reproduction of a population and to the suppression of other traits.

7th Grade Critical Standards Social Studies (Geography)

1.) Describe the world in spatial terms using maps and other geographic representations, tools, and technologies.

- Explaining the use of map essentials, including type, projections, scale, legend, distance, direction, grid, and symbols
Examples: type—reference, thematic, planimetric, topographic, globe and map projections, aerial photographs, satellite images
- Identifying geospatial technologies to acquire, process, and report information from a spatial perspective
Examples: Google Earth, Global Positioning System (GPS), geographic information system (GIS), satellite-remote sensing, aerial photography
- Utilizing maps to explain relationships and environments among people and places, including trade patterns, governmental alliances, and immigration patterns
- Applying mental maps to answer geographic questions, including how experiences and cultures influence perceptions and decisions
- Categorizing the geographic organization of people, places, and environments using spatial models
Examples: urban land-use patterns, distribution and linkages of cities, migration patterns, population-density patterns, spread of culture traits, spread of contagious diseases through a population

2.) Determine how regions are used to describe the organization of Earth's surface.

- Identifying physical and human features used as criteria for mapping formal, functional, and perceptual regions
Examples: physical—landforms, climates, bodies of water, resources
human—language, religion, culture, economy, government
- Interpreting processes and reasons for regional change, including land use, urban growth, population, natural disasters, and trade
- Analyzing interactions among regions to show transnational relationships, including the flow of commodities and Internet connectivity
Examples: winter produce to Alabama from Chile and California, poultry from Alabama to other countries (Alabama)
- Comparing how culture and experience influence individual perceptions of places and regions
Examples: cultural influences—language, religion, ethnicity, iconography, symbology, stereotypes
- Explaining globalization and its impact on people in all regions of the world
Examples: quality and sustainability of life, international cooperation

3.) Compare geographic patterns in the environment that result from processes within the atmosphere, biosphere, lithosphere, and hydrosphere of Earth's physical systems.

- Comparing Earth-Sun relationships regarding seasons, fall hurricanes, monsoon rainfalls, and tornadoes
- Explaining processes that shape the physical environment, including long-range effects of extreme weather phenomena
Examples: processes—plate tectonics, glaciers, ocean and atmospheric circulation, El Niño
long-range effects—erosion on agriculture, typhoons on coastal ecosystems
- Describing characteristics and physical processes that influence the spatial distribution of ecosystems and biomes on Earth's surface
- Comparing how ecosystems vary from place to place and over time
Examples: place to place—differences in soil, climate, and topography
over time—alteration or destruction of natural habitats due to effects of floods and forest fires, reduction of species diversity due to loss of natural habitats, reduction of wetlands due to

replacement by farms, reduction of forest and farmland due to replacement by housing developments, reduction of previously cleared land due to reforestation efforts

- Comparing geographic issues in different regions that result from human and natural processes
Examples: human—increase or decrease in population, land-use change in tropical forests
natural—hurricanes, tsunamis, tornadoes, floods

7th Grade Civics

1.) Compare influences of ancient Greece, the Roman Republic, the Judeo-Christian tradition, the Magna Carta, federalism, the Mayflower Compact, the English Bill of Rights, the House of Burgesses, and the Petition of Rights on the government of the United States.

2.) Explain essential characteristics of the political system of the United States, including the organization and function of political parties and the process of selecting political leaders.

- Describing the influence of John Locke, Thomas Hobbes, Jean-Jacques Rousseau, Thomas Paine, Niccolò Machiavelli, Charles de Montesquieu, and François-Marie Arouet (Voltaire) on the political system of the United States

3.) Compare the government of the United States with other governmental systems, including monarchy, limited monarchy, oligarchy, dictatorship, theocracy, and pure democracy.

4.) Describe structures of state and local governments in the United States, including major Alabama offices and officeholders. (Alabama)

- Describing how local and state governments are funded (Alabama)

5.) Compare duties and functions of members of the legislative, executive, and judicial branches of Alabama's local and state governments and of the national government. (Alabama)

- Locating political and geographic districts of the legislative, executive, and judicial branches of Alabama's local and state governments and of the national government (Alabama)
- Describing the organization and jurisdiction of courts at the local, state, and national levels within the judicial system of the United States (Alabama)
- Explaining concepts of separation of powers and checks and balances among the three branches of state and national governments (Alabama)

6) Explain the importance of juvenile, adult, civil, and criminal laws within the judicial system of the United States.

- Explaining rights of citizens as guaranteed by the Bill of Rights under the Constitution of the United States
- Explaining what is meant by the term *rule of law*
- Justifying consequences of committing a civil or criminal offense
- Contrasting juvenile and adult laws at local, state, and federal levels (Alabama)

10.) Describe individual and civic responsibilities of citizens of the United States.

Examples: individual—respect for rights of others, self-discipline, negotiation, compromise, fiscal responsibility

civic—respect for law, patriotism, participation in political process, fiscal responsibility

- Differentiating rights, privileges, duties, and responsibilities between citizens and noncitizens
- Explaining how United States' citizenship is acquired by immigrants
- Explaining character traits that are beneficial to individuals and society
Examples: honesty, courage, compassion, civility, loyalty