

Typing

CCSS.ELA-LITERACY.W.6.6

Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.

Vocabulary Acquisition and Use

CCSS.ELA-LITERACY.L.6.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.

CCSS.ELA-LITERACY.L.6.4.B

Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).

CCSS.ELA-LITERACY.L.6.5

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

CCSS.ELA-LITERACY.L.6.5.A

Interpret figures of speech (e.g., personification) in context.

CCSS.ELA-LITERACY.L.6.5.C

Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty).

CCSS.ELA-LITERACY.L.6.6

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Conventions of Standard English

CCSS.ELA-LITERACY.L.6.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.L.6.1.A

Ensure that pronouns are in the proper case (subjective, objective, possessive).

CCSS.ELA-LITERACY.L.6.1.B

Use intensive pronouns (e.g., myself, ourselves).

CCSS.ELA-LITERACY.L.6.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

CCSS.ELA-LITERACY.L.6.2.A

Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.

Craft and Structure

CCSS.ELA-LITERACY.RL.6.6

Explain how an author develops the point of view of the narrator or speaker in a text.

Text Types and Purposes

CCSS.ELA-LITERACY.W.6.1

Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-LITERACY.W.6.1.A

Introduce claim(s) and organize the reasons and evidence clearly.

Statistics & Probability

CCSS.MATH.CONTENT.6.SP.A.1

Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.

CCSS.MATH.CONTENT.6.SP.B.5

Summarize numerical data sets in relation to their context.

CCSS.MATH.CONTENT.6.SP.B.5.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.

Ratios & Proportional Relationships

CCSS.MATH.CONTENT.6.RP.A.1

Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

CCSS.MATH.CONTENT.6.RP.A.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.

Expressions & Equations

CCSS.MATH.CONTENT.6.EE.A.2

Write, read, and evaluate expressions in which letters stand for numbers.

Expressions & Equations

CCSS.MATH.CONTENT.6.EE.A.2.A

Write expressions that record operations with numbers and with letters standing for numbers.

CCSS.MATH.CONTENT.6.EE.A.2.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.

CCSS.MATH.CONTENT.6.EE.A.2.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).

CCSS.MATH.CONTENT.6.EE.A.3

Apply the properties of operations to generate equivalent expressions.

CCSS.MATH.CONTENT.6.EE.A.4

Identify when two expressions are equivalent.

CCSS.MATH.CONTENT.6.EE.B.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.

CCSS.MATH.CONTENT.6.EE.B.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.

Expressions & Equations

CCSS.MATH.CONTENT.6.EE.C.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.

The Number System

CCSS.MATH.CONTENT.6.NS.B.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.

Empowered Learner

ISTE 1.1

Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

ISTE 1.1.d

Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

Digital Citizen

ISTE 1.2

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

STE 1.2.a

Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

ISTE 1.2.b

Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.

ISTE 1.2.c

Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

ISTE 1.2.d

Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

Knowledge Constructor

ISTE 1.3

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

ISTE 1.3.b

Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

Creative Communicator

ISTE 1.6

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

ISTE 1.6.b

Students create original works or responsibly repurpose or remix digital resources into new creations.

Engineering Design

NGSS MS-ETS1-1

Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

NGSS MS-ETS1-2

Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

NGSS MS-ETS1-3

Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

NGSS MS-ETS1-4

Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

From Molecules to Organisms: Structures & Processes

NGSS MS-LS1-1

Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.

NGSS MS-LS1-2

Develop and use a model to describe the function of a cell as a whole and ways the parts of cells contribute to the function.

NGSS MS-LS1-3

Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

NGSS MS-LS1-4

Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

NGSS MS-LS1-5

Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

NGSS MS-LS1-6

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

NGSS MS-LS1-7

Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.

From Molecules to Organisms: Structures & Processes

NGSS MS-LS1-8

Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

Heredity: Inheritance & Variation of Traits

NGSS MS-LS3-1

Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.

NGSS MS-LS3-2

Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Biological Evolution: Unity & Diversity

NGSS MS-LS4-1

Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.

NGSS MS-LS4-2

Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.

Biological Evolution: Unity & Diversity

NGSS MS-LS4-3

Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.

NGSS MS-LS4-4

Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.

NGSS MS-LS4-5

Gather and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms.

NGSS MS-LS4-6

Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.

Earth's Place in the Universe

NGSS MS-ESS1-1

Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.

NGSS MS-ESS1-2

Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.

Earth's Place in the Universe

NGSS MS-ESS1-3

Analyze and interpret data to determine scale properties of objects in the solar system.

NGSS MS-ESS1-4

Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.

Earth's Systems

NGSS MS-ESS2-1

Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.

NGSS MS-ESS2-2

Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.

NGSS MS-ESS2-3

Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.

NGSS MS-ESS2-4

Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

NGSS MS-ESS2-5

Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.

Earth's Systems

NGSS MS-ESS2-6

Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.

Earth and Human Activity

NGSS MS-ESS3-1

Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.

NGSS MS-ESS3-2

Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

NGSS MS-ESS3-3

Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

NGSS MS-ESS3-4

Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

NGSS MS-ESS3-5

Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Earth's Systems

NGSS MS-ESS2-6

Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.

Earth and Human Activity

NGSS MS-ESS3-1

Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.

NGSS MS-ESS3-2

Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

NGSS MS-ESS3-3

Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

NGSS MS-ESS3-4

Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

NGSS MS-ESS3-5

Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Matter & its Interactions

NGSS MS-PS1-1

Develop models to describe the atomic composition of simple molecules and extended structures.

NGSS MS-PS1-2

Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

NGSS MS-PS1-3

Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.

NGSS MS-PS1-4

Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

NGSS MS-PS1-5

Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.

NGSS MS-PS1-6

Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

Motion and Stability: Forces & Interactions

NGSS MS-PS2-1

Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.

Motion and Stability: Forces & Interactions

NGSS MS-PS2-2

Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.

NGSS MS-PS2-3

Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.

NGSS MS-PS2-4

Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.

NGSS MS-PS2-5

Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

Energy

NGSS MS-PS3-1

Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.

NGSS MS-PS3-2

Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.

Energy

NGSS MS-PS3-3

Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.

NGSS MS-PS3-4

Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.

NGSS MS-PS3-5

Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.

Waves and their Applications in Technologies for Information Transfer

NGSS MS-PS4-1

Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.

NGSS MS-PS4-2

Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.

NGSS MS-PS4-3

Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.

Geography

Florida SS.6.G.2.3

Analyze the relationship of physical geography to the development of ancient river valley civilizations.

Ohio G.PR.5

Regions can be determined, classified and compared using data related to various criteria including landform, climate, population, and cultural and economic characteristics

Economics

Florida SS.6.E.1.3

Describe the following economic concepts as they relate to early civilization: scarcity, opportunity cost, supply and demand, barter, trade, productive resources (land, labor, capital, entrepreneurship).

Florida SS.6.E.3.4

Describe the relationship among civilizations that engage in trade, including the benefits and drawbacks of voluntary trade.

Ohio E.S.13

The fundamental questions of economics include what to produce, how to produce and for whom to produce.

Ohio E.S.14

When regions and/or countries specialize, global trade occurs.

Ohio E.DM.12

The choices made by individuals and governments have both present and future consequences. The evaluation of choices is relative and may differ across individuals and societies.

Economics

Ohio E.M.15

The interaction of supply and demand, influenced by competition, helps to determine price in a market. This interaction also determines the quantities of outputs produced and the quantities of productive resources used.

Ohio E.FL.16

When selecting items to buy, individuals can weigh costs and benefits and compare the price and quality of available goods and services.

Texas 6A

Describe ways in which the factors of production (natural resources, labor, capital, and entrepreneurs) influence the economies of various contemporary societies

Texas 6C

Explain the impact of the distribution of resources on international trade and economic interdependence among and within societies.

Texas 8A

Define and give examples of agricultural, retail, manufacturing (goods), and service industries.

Government

Ohio G.RS.10

Governments can be categorized as monarchies, theocracies, dictatorships or democracies, but categories may overlap and labels may not accurately represent how governments function. The extent of citizens' liberties and responsibilities varies according to limits on governmental authority.

Government

California 6.4

Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Ancient Greece.

California 6.7

Students analyze the geographic, political, economic, religious, and social structures during the development of Rome.

Florida SS.6.CG.1

Demonstrate an understanding of the origins and purposes of government, law and the American political system.

Florida SS.6.CG.1.1

Analyze how democratic concepts developed in ancient Greece served as a foundation for the United States' constitutional republic.

Florida SS.6.CG.1.2

Analyze the influence of ancient Rome on the United States' constitutional republic.

Florida SS.6.CG.1.3

Examine rule of law in the ancient world and its influence on the United States' constitutional republic.

Texas 9

The student understands the concepts of limited and unlimited governments.

Texas 10

The student understands various ways in which people organize governments.

World History

Florida SS.6.W.2.2

Describe how the developments of agriculture and metallurgy related to settlement, population growth, and the emergence of civilization.

Florida SS.6.W.2.3

Identify the characteristics of civilization.

Florida SS.6.W.2.5

Summarize important achievements of Egyptian civilization.

Florida SS.6.W.3.5

Summarize the important achievements and contributions of ancient Greek civilization.

Florida SS.6.W.3.14

Describe the key achievements and contributions of Roman civilization.

Florida SS.6.W.4.3

Recognize the political and cultural achievements of the Mauryan and Gupta empires.

Florida SS.6.W.4.5

Summarize the important achievements and contributions of ancient Indian civilization.

Florida SS.6.W.4.8

Describe the contributions of classical and post classical China.

Florida SS.6.W.4.10

Explain the significance of the silk roads and maritime routes across the Indian Ocean to the movement of goods and ideas among Asia, East Africa, and the Mediterranean Basin.

World History

Florida SS.6.W.2.2

Describe how the developments of agriculture and metallurgy related to settlement, population growth, and the emergence of civilization.

Florida SS.6.W.2.3

Identify the characteristics of civilization.

Florida SS.6.W.2.5

Summarize important achievements of Egyptian civilization.

Florida SS.6.W.3.5

Summarize the important achievements and contributions of ancient Greek civilization.

Florida SS.6.W.3.14

Describe the key achievements and contributions of Roman civilization.

Florida SS.6.W.4.3

Recognize the political and cultural achievements of the Mauryan and Gupta empires.

Florida SS.6.W.4.5

Summarize the important achievements and contributions of ancient Indian civilization.

Florida SS.6.W.4.8

Describe the contributions of classical and post classical China.

Florida SS.6.W.4.10

Explain the significance of the silk roads and maritime routes across the Indian Ocean to the movement of goods and ideas among Asia, East Africa, and the Mediterranean Basin.

World History

California 6.2

Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of Mesopotamia, Egypt, and Kush.

California 6.5

Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of India.

California 6.6

Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of China.

Ohio H.EC.2

Early civilizations (India, Egypt, China and Mesopotamia) had unique governments, economic systems, social structures, religions, technologies and agricultural practices and products. The cultural practices and products of these early civilizations can be used to help understand the Eastern Hemisphere today.

Texas 1

The student understands that historical events influence contemporary events.

Texas 2

The student understands the influences of individuals and groups from various cultures on various historical and contemporary societies.