

# Paris Crestwood

## 6<sup>th</sup> Grade

# Curriculum Maps

2021-2022 School Year

The following document includes the following:

1. 6<sup>th</sup> Grade Standards:

- a. Common Core State Standards for ELA and Mathematics
- b. Next Generation Science Standards for Science
- c. Illinois Learning Standards for Social Studies

2. Scope and Sequences:

- a. Literature (broken into Reading & English/Language Arts)
- b. Mathematics (Big Ideas)
- c. Science (Prentice Hall Science Explorer)
- d. Social Studies (Discovery Education)

# Common Core State Standards for English/Language Arts

## **Reading: Literature**

- RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- RL.6.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
- RL.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone
- RL.6.5 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
- RL.6.6 Explain how an author develops the point of view of the narrator or speaker in a text.
- RL.6.7 Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.
- RL.6.9 Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.
- RL.6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

## **Reading: Informational Text**

- RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- RI.6.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).
- RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
- RI.6.5 Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.
- RI.6.6 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.
- RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
- RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
- RI.6.9 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).
- RI.6.10 By the end of the year, read and comprehend literary nonfiction in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

## **Writing Standards**

- W.6.1 Write arguments to support claims with clear reasons and relevant evidence.
  - W.6.1.a Introduce claim(s) and organize the reasons and evidence clearly.

- W.6.1.b Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.
- W.6.1.c Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.
- W.6.1.d Establish and maintain a formal style.
- W.6.1.e Provide a concluding statement or section that follows from the argument presented.
- W.6.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
  - W.6.2.a Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
  - W.6.2.b Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
  - W.6.2.c Use appropriate transitions to clarify the relationships among ideas and concepts.
  - W.6.2.d Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - W.6.2.e Establish and maintain a formal style.
  - W.6.2.f Provide a concluding statement or section that follows from the information or explanation presented.
- W.6.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.
  - W.6.3.a Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
  - W.6.3.b Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.
  - W.6.3.c Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.
  - W.6.3.d Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.
  - W.6.3.e Provide a conclusion that follows from the narrated experiences or events.
- W.6.4 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 1-3 above.)
- W.6.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 6 here.)
- 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.
- W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
- W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

- W.6.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.
  - W.6.9.a Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").
  - W.6.9.b Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").
- W.6.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

### **Language Standards**

- L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
  - L.6.1.a Ensure that pronouns are in the proper case (subjective, objective, possessive).
  - L.6.1.b Use intensive pronouns (e.g., myself, ourselves).
  - L.6.1.c Recognize and correct inappropriate shifts in pronoun number and person.
  - L.6.1.d Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).
  - L.6.1.e Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.
- L.6.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
  - L.6.2.a Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.
  - L.6.2.b Spell correctly.
- L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
  - L.6.3.a Vary sentence patterns for meaning, reader/listener interest, and style.
  - L.6.3.b Maintain consistency in style and tone.
- 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.
  - L.6.4.a Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
  - 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).
  - L.6.4.c Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
  - L.6.4.d Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
- L.6.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
  - L.6.5.a Interpret figures of speech (e.g., personification) in context.
  - L.6.5.b Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.

- L.6.5.c Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty).
- 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.

# Common Core State Standards for Mathematics

## **Ratios & Proportional Relationships**

- 6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."
- 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. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is  $3/4$  cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."<sup>1</sup>
- 6.RP.A.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
  - 6.RP.A.3.a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
  - 6.RP.A.3.b Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?
  - 6.RP.A.3.c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means  $30/100$  times the quantity); solve problems involving finding the whole, given a part and the percent.
  - 6.RP.A.3.d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

## **The Number System**

- 6.NS.A.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for  $(2/3) \div (3/4)$  and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that  $(2/3) \div (3/4) = 8/9$  because  $3/4$  of  $8/9$  is  $2/3$ . (In general,  $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share  $1/2$  lb of chocolate equally? How many  $3/4$ -cup servings are in  $2/3$  of a cup of yogurt? How wide is a rectangular strip of land with length  $3/4$  mi and area  $1/2$  square mi?.
- 6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm.
- 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
- 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. For example, express  $36 + 8$  as  $4(9 + 2)$ ..
- 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

- 6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
  - 6.NS.C.6.a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g.,  $-(-3) = 3$ , and that 0 is its own opposite.
  - 6.NS.C.6.b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
  - 6.NS.C.6.c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
- 6.NS.C.7 Understand ordering and absolute value of rational numbers.
  - 6.NS.C.7.a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret  $-3 > -7$  as a statement that -3 is located to the right of -7 on a number line oriented from left to right.
  - 6.NS.C.7.b Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write  $-3\text{ }^{\circ}\text{C} > -7\text{ }^{\circ}\text{C}$  to express the fact that  $-3\text{ }^{\circ}\text{C}$  is warmer than  $-7\text{ }^{\circ}\text{C}$ .
  - 6.NS.C.7.c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of -30 dollars, write  $|-30| = 30$  to describe the size of the debt in dollars.
  - 6.NS.C.7.d Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.
- 6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

### **Expressions & Equations**

- 6.EE.A.1 Write and evaluate numerical expressions involving whole-number exponents.
- 6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers.
  - 6.EE.A.2.a Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as  $5 - y$ .
  - 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. For example, describe the expression  $2(8 + 7)$  as a product of two factors; view  $(8 + 7)$  as both a single entity and a sum of two terms.
  - 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). For example, use the formulas  $V = s^3$  and  $A = 6s^2$  to find the volume and surface area of a cube with sides of length  $s = \frac{1}{2}$ .
- 6.EE.A.3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression  $3(2 + x)$  to produce the equivalent expression  $6 + 3x$ ; apply the distributive property to the expression  $24x + 18y$  to produce the equivalent

expression  $6(4x + 3y)$ ; apply properties of operations to  $y + y + y$  to produce the equivalent expression  $3y$ .

- 6.EE.A.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions  $y + y + y$  and  $3y$  are equivalent because they name the same number regardless of which number  $y$  stands for..
- 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.
- 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.
- 6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations of the form  $x + p = q$  and  $px = q$  for cases in which  $p$ ,  $q$  and  $x$  are all nonnegative rational numbers.
- 6.EE.B.8 Write an inequality of the form  $x > c$  or  $x < c$  to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form  $x > c$  or  $x < c$  have infinitely many solutions; represent solutions of such inequalities on number line diagrams.
- 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. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation  $d = 65t$  to represent the relationship between distance and time.

## **Geometry**

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

## **Statistics & Probability**

- 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. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.
- 6.SP.A.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.

- 6.SP.A.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
- 6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- 6.SP.B.5 Summarize numerical data sets in relation to their context, such as by:
  - 6.SP.B.5.a Reporting the number of observations.
  - 6.SP.B.5.b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
  - 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.
  - 6.SP.B.5.d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

# Next Generation Science Standards

## **Physical Science**

- MS-PS1-1 Develop models to describe the atomic composition of simple molecules and extended structures.
- 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.
- MS-PS1-3 Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- 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.
- 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.
- MS-PS1-6 Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.
- MS-PS2-1 Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
- 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.
- MS-PS2-3 Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- 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.
- 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.
- 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.
- 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.
- MS-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
- 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.
- 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.
- 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.
- MS-PS4-2 Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.
- 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.

## **Life Science**

- 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.

- MS-LS1-2 Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.
- MS-LS1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
- MS-LS1-4 Use argument based on empirical 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.
- MS-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
- 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.
- 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.
- 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.
- MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and population of organisms in an ecosystem.
- MS-LS2-2 Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- MS-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
- MS-LS2-4 Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
- MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- MS-LS4-5 Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.
- 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 and Space Sciences**

- 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.
- MS-ESS1-2 Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.
- MS-ESS1-3 Analyze and interpret data to determine scale properties of objects in the solar system.
- 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.
- MS-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
- MS-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
- 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.
- 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.
- MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.
- 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.
- 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.
- MS-ESS3-2 Analyze and interpret data on natural hazards to forecast catastrophic events and inform the development of technologies to mitigate their effects.
- MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
- 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.
- MS-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

## **Engineering and Technology Sciences**

- 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.
- MS-ETS1-2 Evaluate competing design solutions using a systemic process to determine how well they meet the criteria and constraints of the problem.
- 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.
- 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.

# Illinois Learning Standards for Social Studies

## Inquiry Skills

- SS.IS.1.6-8 Create essential questions to help guide inquiry about a topic.
- SS.IS.2.6-8 Ask essential and focusing questions that will lead to independent research.
- SS.IS.3.6-8 Determine sources representing multiple points of view that will assist in organizing a research plan.
- SS.IS.4.6-8.LC Determine the value of sources by evaluating their relevance and intended use.
- SS.IS.4.6-8.MdC Determine the credibility of sources based upon their origin, authority, and context.
- SS.IS.4.6-8.MC Gather relevant information from credible sources and determine whether they support each other.
- SS.IS.5.6-8.LC Appropriately cite all sources utilized.
- SS.IS.5.6-8.MdC Identify evidence from multiple sources to support claims, noting its limitations.
- SS.IS.5.6-8.MC Develop claims and counterclaims while point out the strengths and limitations of both.
- SS.IS.6.6-8.LC Construct arguments using claims and evidence from multiple sources, while acknowledging their strengths and limitations.
- SS.IS.6.6-8.MdC Construct explanations using reasoning, correct sequence, examples and details, while acknowledging their strengths and weaknesses.
- SS.IS.6.6-8.MC Present arguments and explanations that would appeal to audiences and venues outside the classroom using a variety of media.
- SS.IS.7.6-8 Critique the structure and credibility of arguments and explanations (self and others).
- SS.IS.8.6-8.LC Analyze how a problem can manifest itself and the challenges and opportunities faced by those trying to address it.
- SS.IS.8.6-8.MdC Assess individual and collective capacities to take action to address problems and identify potential outcomes.
- SS.IS.8.6-8.MC Apply a range of deliberative and democratic procedures to make decisions and take action in schools and community contexts.

## Civics Standards

- SS.CV.1.6-8.LC Identify roles played by citizens (examples: voters, jurors, taxpayers, military, protesters and office holders).
- SS.CV.1.6-8.MdC Describe the roles of political, civil, and economic organizations in shaping people's lives.
- SS.CV.1.6-8.MC Evaluate the powers and responsibilities of citizens, political parties, interest groups, and the media.
- SS.CV.2.6-8.LC Describe the origins, purposes, and impact of constitutions, laws, treaties, and international agreements.
- SS.CV.2.6-8.MdC Explain the origins, functions, and structure of government with reference to the U.S. Constitution, Illinois Constitution, and other systems of government.
- SS.CV.2.6-8.MC Analyze the power and limits of governments, public officials, and bureaucracies at different levels in the United States and other countries.
- SS.CV.3.6-8 Compare the means by which individuals and groups change societies, promote the common good, and protect rights.
- SS.CV.4.6-8.LC Explain the connection between interests and perspectives, civic virtues, and democratic principles when addressing issues in government and society.

- SS.CV.4.6-8.MdC Analyze the ideas and principles contained in the founding documents of the United States and other countries, and explain how they influence the social and political system.
- SS.CV.4.6-8.MC Critique deliberative processes used by a wide variety of groups in various settings.
- SS.CV.5.6-8 Apply civic virtues and democratic principles in school and community settings.
- SS.CV.6.6-8.LC Determine whether specific rules and laws (both actual and proposed) resolve the problems they were meant to address.
- SS.CV.6.6-8.MdC Analyze the purposes, implementation, and consequences of public policies in historic and contemporary settings.
- SS.CV.6.6-8.MC Develop procedures for making decisions in historic and contemporary settings (such as the school, civil society, or local, state, or national government.)

### **Geography Standards**

- SS.G.1.6-8.LC Use geographic representations (maps, photographs, satellite images, etc.) to explain the relationships between the locations (places and regions) and changes in their environment.
- SS.G.1.6-8.MdC Use mapping and graphing to represent and analyze spatial patterns of different environmental and cultural characteristics.
- SS.G.1.6-8.MC Construct different representations to explain the spatial patterns of cultural and environment characteristics.
- SS.G.2.6-8.LC Explain how humans and their environment affect one another.
- SS.G.2.6-8.MdC Compare and contrast cultural and environmental characteristics of different places or regions.
- SS.G.2.6-8.MC Evaluate how cultural and economic decisions influence environments and the daily lives of people in both nearby and distant places.
- SS.G.3.6-8.LC Explain how environmental characteristics impact human migration and settlement.
- SS.G.3.6-8.MdC Explain how changes in transportation and communication influence the spatial connections among human settlements and affect the spread of ideas and culture.
- SS.G.3.6-8.MC Evaluate the influences of long-term human-induced environmental change on spatial patterns of conflict and cooperation.
- SS.G.4.6-8.LC Identify how cultural and environmental characteristics vary among regions of the world.
- SS.G.4.6-8.MdC Explain how global changes in population distribution patterns affect changes in land use.
- SS.G.4.6-8.MC Analyze how the environmental characteristics of places and production of goods influence patterns of world trade.

### **Economics and Financial Literacy Standards**

- SS.EC.1.6-8.LC Explain how economic decisions affect the well-being of individuals, businesses, and society.
- SS.EC.1.6-8.MdC Explain how external benefits and costs influence choices.
- SS.EC.1.6-8.MC Evaluate alternative approaches or solutions to current economic issues in terms of benefits and costs for different groups and society as a whole.
- SS.EC.2.6-8.LC Analyze the role of innovation and entrepreneurship in a market economy.
- SS.EC.2.6-8.MdC Describe the roles of institutions, such as corporations, non-profits, and labor unions in a market economy.

- SS.EC.2.6-8.MC Explain how changes in supply and demand cause changes in prices and quantities of goods and services, labor, credit, and foreign currencies.
- SS.EC.3.6-8.LC Explain why standards of living increase as productivity improves.
- SS.EC.3.6-8.MdC Explain barriers to trade and how those barriers influence trade among nations.
- SS.EC.3.6-8.MC Evaluate employment, unemployment, inflation, total production, income and economic growth data and how they affect different groups.
- SS.EC.4.6-8.LC Analyze the relationship between skills, education, jobs, and income.
- SS.EC.4.6-8.MdC Identify how people choose to buy goods and services while still maintaining a budget based on income, taxes, savings, and fixed and variable interest rates.
- SS.EC.4.6-8.MC Describe the connection between credit, credit options, and interest and credit history.
- SS.EC.5.6-8.LC Explain the roles and relationships between savers, borrowers, interest, time, and the purposes for saving.
- SS.EC.5.6-8.MdC Explain the correlation between investors, investment options (and associated risks), and income/wealth.
- SS.EC.5.6-8.MC Analyze the relationship between financial risks and protection, insurance and costs.

### **History Standards**

- SS.H.1.6-8.LC Classify series of historical events and developments as examples of change and/or continuity.
- SS.H.1.6-8.MdC Analyze connections among events and developments in broader historical contexts.
- SS.H.1.6-8.MC Use questions generated about individuals and groups to analyze why they, and the developments they shaped, are seen as historically significant.
- SS.H.2.6-8.LC Explain how and why perspectives of people have changed over time.
- SS.H.2.6-8.MdC Analyze multiple factors that influenced the perspectives of people during different historical eras.
- SS.H.2.6-8.MC Analyze how people's perspectives influenced what information is available in the historical sources they created.
- SS.H.3.6-8.LC Classify the kinds of historical sources used in secondary interpretation.
- SS.H.3.6-8.MdC Detect possible limitations in the historical record based on evidence collected from different kinds of historical sources.
- SS.H.3.6-8.MC Use other historical sources to infer a plausible maker, date, place of origin, and intended audience for historical sources where information is not easily identified.
- SS.H.4.6-8.LC Explain multiple causes and effects of historical events.
- SS.H.4.6-8.MdC Compare the central historical arguments in secondary works across multiple media.
- SS.H.4.6-8.MC Organize applicable evidence into a coherent argument about the past.

## 6<sup>th</sup> Grade Reading Scope and Sequence

<u>Quarter</u>	<u>Topic/Story</u>	<u>Skills</u>	<u>Common Core State Standards</u>
Quarter 1	Fiction: <u>Harry Potter</u>	Character Development, Plot	RL.6.3, RL.6.5
Quarter 2	Poetic Language: <u>Love That Dog</u> Gothic Fiction: Halloween Short Stories	Writing Paragraphs, Figurative Language, Poetry	W.6.1, W.6.4, W.6.5, L.6.2, L.6.3, L.6.5A, L.6.5B, L.6.5C, RL.6.1, RL.6.4, RL.6.5
Quarter 3	Communities: <u>The Watsons Go to Birmingham</u>	Nonfiction Resources, Plot, Cause and Effect, Characterization	RI.6.1, RI.6.2, RI.6.3, RI.6.5
Quarter 4	Science Fiction: <u>The Giver &amp; Among the Hidden</u>	Dystopian Fiction, Figurative Language, Plot, Precision of Language	RL.6.3, RL.6.5, L.6.2, L.6.3, L.6.5A, L.6.5B, L.6.5C

## 6<sup>th</sup> Grade English/Language Arts Vocabulary and Grammar Focus

<b>INSTRUCTIONAL TOOL</b>	<b>COMMON CORE STATE STANDARDS</b>
6A Class: Bizarre Mystery of Horribly Hard Middle School	L.6.1, L.6.2, L.6.3
6B Class: Caught Ya! Hair Beast	L.6.1, L.6.2, L.6.3
Greek and Latin Roots Vocabulary Units	L.6.4, L.6.5

## 6th Grade Mathematics Scope and Sequence Curriculum: Big Ideas

CHAPTER	CHAPTER TITLE	# OF LESSONS	ANTICIPATED DAYS TO COMPLETE	COMMON CORE STANDARDS
1	Numerical Expressions and Factors	5	7	6.NS.4, 6.NS.5, 6.NS.6, 6.NS.7
2	Fractions and Decimals	7	7	6.NS.1, 6.RP.2, 6.RP.3
3	Ratios and Rates	6	10	6.RP.1, 6.RP.2, 6.RP.3
4	Percents	4	8	6.RP.3
5	Algebraic Expressions and Properties	5	8	6.EE.1, 6.EE.2, 6.EE.3, 6.EE.4
6	Equations	4	7	6.EE.5, 6.EE.7, 6.EE.8, 6.EE.9
7	Area, Surface Area, and Volume	7	8	6.G.1, 6.G.2, 6.G.4
8	Integers, Number Lines, and the Coordinate Plane	8	10	6.G.3
9	Statistical Measures	5	6	6.SP.A.1, 6.SP.A.2, 6.SP.A.3
10	Data Displays	6	7	6.SP.B.4, 6.SP.B.5

## 6th Grade High Mathematics Scope and Sequence Curriculum: Big Ideas 7<sup>th</sup> Grade Book

CHAPTER	CHAPTER TITLE	# OF LESSONS	ANTICIPATED DAYS TO COMPLETE	COMMON CORE STANDARDS
1	Adding and Subtracting Rational Numbers	5	8	7.NS.A.1, 7.NS.A.3
2	Multiplying and Dividing Rational Numbers	5	10	7.NA.A.2, 7.NS.A.3
3	Expressions	4	6	7.EE.A.1, 7.EE.A.2
4	Equations and Inequalities	7	11	7.EE.B.3, 7.EE.B.4
5	Ratios and Proportions	6	10	7.RP.A.1, 7.RP.A.2, 7.RP.A.3
6	Percents	7	8	7.RP.A.3
7	Probability	4	6	7.SP.C.5, 7.SP.C.6, 7.SP.C.7, 7.SP.C.8
8	Statistics	4	6	7.SP.A.1, 7.SP.A.2, 7.SP.B.3, 7.SP.B.4
9	Geometric Shapes and Angles	5	7	7.G.A.1, 7.G.A.2, 7.G.A.3, 7.G.B.5
10	Surface Area and Volume	6	8	7.G.B.4, 7.G.B.6

## 6<sup>th</sup> Grade Science Scope and Sequence Curriculum: Prentice Hall Science Explorer

QUARTER	UNIT	UNIT TITLE	ANTICIPATED WEEKS TO COMPLETE	NEXT GENERATION SCIENCE STANDARDS
1	1	Scientific Method	1	Multiple Performance Expectations
	2	Minerals (Crystal Formation, Mining/Natural Resources and Conservation)	4	MS-PS1-3
	3	Rocks (Rock Cycle, Volcanoes and Igneous Rocks, Erosion/Deposition and Sedimentary Rocks)	5	MS-ESS2-1, MS-ESS2-3, MS-ESS3-1, MS-ESS1-3, MS-ESS2-2
2	4	Fossils (Types, How They Form, Finding Ages of Rocks – Relative and Radioactive Dating, Geologic Time Scale)	4	MS-LS4-1, MS-LS4-2, MS-ESS1-4
	5	Volcano or Rock Project	2	MS-ESS1-3, MS-ESS2-2
	6	Mass Movements	4	
3	7	Water Erosion (Runoff/Groundwater Erosion, Floods, Glaciers, Wind and Beach Erosion)	5	MS-ESS2-4
	8	Astronomy (Earth's Days and Seasons/Eclipses, Moon Phases and Tides, Plant Models to Scale and PowerPoint Presentations, Mars Rover Lab)	4	MS-ESS1-1, MS-ESS1-2, MS-ESS1-3
4	9	Plate Tectonics (Convection, Conduction, Radiation, Earth's Magnetic Field)	4	MS-ESS2-3
	10	Earthquakes (Seismic Waves, Building Quake Proof Structures)	4	MS-ESS2-2, MS-ESS3-2

## 6<sup>th</sup> Grade Social Studies Scope and Sequence Curriculum: Discovery Education

UNIT	UNIT TITLE	ANTICIPATED DAYS TO COMPLETE	ILLINOIS LEARNING STANDARDS
1	Introduction to Geography	30	SS.G.1.6-8.LC, SS.G.1.6-8.MdC, SS.G.1.6-8.MC, SS.G.2.6-8.LC, SS.G.2.6-8.MdC, SS.G.2.6-8.MC, SS.G.3.6-8.LC, SS.G.3.6-8.MdC, SS.G.3.6-8.MC, SS.G.4.6-8.LC, SS.G.6-8.MdC
2	Regions in the Western Hemisphere	40	SS.G.1.6-8.LC, SS.G.1.6-8.MdC, SS.G.1.6-8.MC, SS.G.2.6-8.LC, SS.G.2.6-8.MdC, SS.G.2.6-8.MC, SS.G.3.6-8.LC, SS.G.3.6-8.MdC, SS.G.3.6-8.MC, SS.G.4.6-8.LC, SS.G.6-8.MdC
3	Regions in the Eastern Hemisphere	85	SS.G.1.6-8.LC, SS.G.1.6-8.MdC, SS.G.1.6-8.MC, SS.G.2.6-8.LC, SS.G.2.6-8.MdC, SS.G.2.6-8.MC, SS.G.3.6-8.LC, SS.G.3.6-8.MdC, SS.G.3.6-8.MC, SS.G.4.6-8.LC, SS.G.6-8.MdC
4	Global Patterns	20	SS.H.1.6-8.LC, SS.H.2.6-8.LC, SS.H.3.6-8.LC, SS.H.4.6-8.LC