Undivided

Unstoppable together

Core Content Connectors (CCCs) and Essential Understandings (EUs) for middle school: grade 6–8

Common Core State Standards (CCSS) were adopted by a majority of states in 2010. They are designed by teachers, parents, and educational experts to ensure that students are prepared for college and employment. Each state's department of education is responsible for ensuring that schools and students achieve the academic standards; however, standards describe *what* to teach, not *how* to teach it.

Core Content Connectors (CCCs) provide the foundation for instruction based on Common Core State Standards, identifying the most important fundamental skills in Mathematics and English Language Arts and breaking them down into more teachable segments in an effort to provide a more digestible framework for reaching the state standards. As stated by the National Center and State Collaborative, which developed the CCCs, they "illustrate the necessary knowledge and skills in order to reach the learning targets within the CCSS; focus on the core content, knowledge, and skills needed at each grade to promote success at the next; and identify priorities in each content area to guide the instruction for students."

Essential Understandings (EUs) are the skills deemed most vital in a discipline, representing the student's ability to synthesize their learning and understand concepts rather than simply perform a rote task. They are the fundamental goals of a particular series of lessons.

The following charts are reproduced from NCSC content developed as part of the National Center and State Collaborative under a grant from the US Department of Education.

Note: Standards with (CA) are applicable to California students only.

Table of Contents:

6th Grade

Math

Ratios and Proportional Relationships

Standards for Math	CCSS	CCCs	Essential Understandings
Understand ratio concepts and use ratio reasoning to solve problems.	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," or, "For every vote that candidate A received, candidate C received nearly three votes."*	6.NO.1f2 - Write or select a ratio to match a given statement and representation. 6.NO.1 f31 - Select or make a statement to interpret a given ratio. 6.PRF.1c1 - Describe the ratio relationship between two quantities for a given situation. 6.PRF.2b3 - Complete a statement that describes the ratio relationship between two quantities.	Match or identify a simple ratio (1:X) to describe the relationship between two quantities.
Understand ratio concepts and use ratio reasoning to solve problems.	2. Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 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*	6.PRF.1c2 - Represent proportional relationships on a line graph. 6.PRF.2b4 - Determine the unit rate in a variety of contextual situations. 6.NO.1f4 - Find a missing value (representations,	

	sugar," or, "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger." *Expectations for unit rates in this grade are limited to non-complex fractions.	whole numbers, common fractions, decimals to hundredths place, percent) for a given ratio.	
Understand ratio concepts and use ratio reasoning to solve problems.	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. 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. B. Solve unit rate problems 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?"* 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. D. Use ratio reasoning to	6.PRF.2b5 - Use ratios and reasoning to solve real-world mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations). 6.NO.1f5 - Solve unit rate problems involving unit pricing. 6.ME.2a2 - Solve one-step, real-world measurement problems involving unit rates with ratios of whole numbers when given the unit rate (*For example, "If 3 inches of snow falls per hour, how much in 6 hours?"*). 7.NO.f6 - Solve word problems involving ratios. 6.NO.1f1 - Calculate a percent of a quantity as rate per 100. 6.ME.1b4 - Complete a conversion table for length, mass, time, and volume. 6.ME.1b5 - Analyze table to answer questions.	State a relationship to quantity out of 100.

	convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	7.NO.1h1 - Identify an equivalent fraction, decimal, and percent when given one of the three numbers.	

The Number System

Standards for Math	CCSS	CCCs	Essential Understandings
Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	1. Interpret and compute quotients of fractions; 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) ÷ (3/4) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (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 miles and area 1/2 square mile?"*	6.NO.2c3 - Solve one-step addition, subtraction, multiplication, or division problems with fractions or decimals.	Concept of +, -, x, ÷. Concept of fraction and decimal. Use concrete object to represent the removal/ subtraction or addition of one-half from or to a whole object.

Compute fluently with multi-digit numbers and find common factors and multiples.	2. Fluently divide multi-digit numbers using the standard algorithm.	6.NO.2c5 - Divide multi-digit whole numbers.	
Compute fluently with multi-digit numbers and find common factors and multiples.	3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	6.NO.2c3 - Solve one-step addition, subtraction, multiplication, or division problems with fractions or decimals.	
Compute fluently with multi-digit numbers and find common factors and multiples.	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)."*	(None)	
Apply and extend previous understandings of numbers to the system of rational numbers.	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	6.NO.1d4 - Select the appropriate meaning of a negative number in a real-world situation.	Ability to select the appropriate representation of more than or less than zero in a real-world situation.

	contexts, explaining the meaning of zero in each situation.		
Apply and extend previous understandings of numbers to the system of rational numbers.	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. A. Recognize opposite signs of numbers as indicating locations on opposite sides of zero on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., –(–3) = 3, and that zero is its own opposite. 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. 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.NO.1d5 - Find given points between -10 and 10 on both axes of a coordinate plane. 6.NO.1d6 - Label points between -10 and 10 on both axes of a coordinate plane. 6.NO.1d1 - Identify numbers as positive or negative. 6.NO.1d2 - Locate positive and negative numbers on a number line. 6.NO.1d3 - Plot positive and negative numbers on a number line. 6.NO.2e1 - Determine the difference between two integers using a number line.	Recognize how values or numbers lie on either side of zero.
Apply and extend previous understandings of numbers to	7. Understand ordering and absolute value of rational numbers.	6.NO.2e2 - Compare two numbers on a number line (e.g., -2 > -9).	

the system of rational numbers.	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."* B. Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, "Write −3°C > −7°C to express the fact that −3°C is warmer than −7°C."* C. Understand the absolute value of a rational number as its distance from zero 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."* 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.NO.1e1 - Determine the meaning of absolute value.	

Apply and extend previous understandings of numbers to the system of rational numbers.	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.	7.NO.2f4 - Use a rate of change or proportional relationship to determine the points on a coordinate plane.	

Expressions and Equations

Standards for Math	CCSS	CCCs	Essential Understandings
Apply and extend previous understandings of arithmetic to algebraic expressions.	1. Write and evaluate numerical expressions involving whole-number exponents.	6.NO.1i1 - Identify what an exponent represents (e.g., $8^3 = 8 \times 8 \times 8$). 6.NO.1i2 - Solve numerical expressions involving whole-number exponents.	
Apply and extend previous understandings of arithmetic to algebraic expressions.	2. Write, read, and evaluate expressions in which letters stand for numbers. 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."* B. Identify parts of an expression using mathematical terms	6.SE.1a2 - Given a real-world problem, write an equation using one set of parentheses.	

	(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."* 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 = s3 and A = 6 s2 to find the volume and surface area of a cube with sides of length s = 1/2."*		
Apply and extend previous understandings of arithmetic to algebraic expressions.	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*	6.SE.1b2 - Use properties to produce equivalent expressions.	

	(4x + 3y); apply properties of operations to y + y + y to produce the equivalent expression 3y."		
Apply and extend previous understandings of arithmetic to algebraic expressions.	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.SE.1b1 - Evaluate whether both sides of an equation are equal.	
Reason about and solve one-variable equations and inequalities.	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.	(None)	
Reason about and solve one-variable equations and inequalities.	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.PRF.2a - Use variables to represent numbers and write expressions when solving real-world problems.	Identify a familiar unit rate.

Reason about and solve one-variable equations and inequalities.	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.NO.2a6 - Solve problems or word problems using up to three-digit numbers and any of the four operations. 6.PRF.1d1 - Solve real-world, single-step linear equations.	Decompose (÷) with concrete objects; use counting to get the answer. Recognize the intended outcome of a word problem based on a linear equation
Reason about and solve one-variable equations and inequalities.	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.SE.1a4 - Given a real-world problem, write an inequality.	
Represent and analyze quantitative relationships between dependent and independent variables.	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*	6.PRF.2a3 - Use variables to represent two quantities in a real-world problem that change in relationship to one another. 6.PRF.2a4 - Analyze the relationships between the dependent and independent variables using graphs and tables that relate to the equation.	

	distances and times, and write the equation d = 65t to represent the relationship between distance and time."		

Geometry

Standards for Math	CCSS	CCCs	Essential Understandings
Solve real-world and mathematical problems involving area, surface area, and volume.	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.ME.1a2 - Identify the appropriate formula (i.e., perimeter, area, volume) to use when measuring for different purposes in a real-life context. 6.ME.2a3 - Apply the formula to find the area of triangles. 6.ME.2b3 - Decompose complex shapes (polygon, trapezoid, pentagon) into simple shapes (rectangles, squares, triangles) to measure area. 6.GM.1d1 - Find the area of quadrilaterals.	Use manipulatives to measure the area of a rectangle (e.g., tiling).
Solve real-world and mathematical problems involving area, surface area, and volume.	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 = l w h and V = b h to find volumes of right rectangular prisms with	6.ME.1a2 - Identify the appropriate formula (i.e., perimeter, area, volume) to use when measuring for different purposes in a real-life context. 6.ME.1c1 - Find the area of a two-dimensional figure and the volume of a three-dimensional figure.	

	fractional edge lengths in the context of solving real-world and mathematical problems.		
Solve real-world and mathematical problems involving area, surface area, and volume.	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.GM.1c7 - Use coordinate points to draw polygons. 6.GM.1c8 - Use coordinate points to find the side lengths of polygons that are horizontal or vertical.	
Solve real-world and mathematical problems involving area, surface area, and volume.	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.	7.GM.1h2 - Find the surface area of three-dimensional figures using nets of rectangles or triangles.	

Statistics and Probability

Standards for Math	CCSS	CCCs	Essential Understandings
Develop understanding of statistical variability.	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*	6.DPS.1a2 - Identify statistical questions and make a plan for data collection.	

	school?" is a statistical question because one anticipates variability in students' ages.		
Develop understanding of statistical variability.	2. Understand that a set of data collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape.	6.DPS.1d4 - Find the range of a given data set. 6.DPS.1d6 - Explain or identify what the mode represents in a set of data.	
Develop understanding of statistical variability.	3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, and a measure of variation describes how its values vary with a single number.	5.DPS.1d1 - Select an appropriate statement about the range of the data for a given graph (bar graph, line plot) up to 10 points. 5.DPS.1e1 - Use measures of central tendency to interpret data including overall patterns in the data. 6.DPS.1d2 - Solve for the mean of a given data set. 6.DPS.1d5 - Explain or identify what the mean represents in a set of data.	
Summarize and describe distributions.	4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	6.DPS.1c2 - Collect and graph data: bar graph, line plots, dot plots, histograms. 7.DPS.1g1 - Graph continuous data using line graphs, histograms, or dot plots.	
Summarize and describe distributions.	5. Summarize numerical data sets in relation to their context, such as by: A. Reporting the number of observations.	6.DPS.1d3 - Select statement that matches mean, mode, and spread of data for one measure of central tendency for a given data set.	Identify the highest and lowest value in a data set given a number line and matching

	B. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. 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 points were gathered. D. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data points were gathered.	7.DPS.1i1 - Solve for the median of a given data set. 6.DPS.1d7 - Explain or identify what the median represents in a set of data. 6.DPS.1e2 - Use measures of central tendency to interpret data including overall patterns in the data. 8.DPS.1i4 - Identify outliers, range, mean, median, and mode.	symbols; identify the representation (plastic snap cubes, wiki sticks) of the mode; use concrete materials to produce the mean (leveled plastic snap cubes).

English Language Arts

Reading: Literature

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Literature: Key Ideas & Details	1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	6.RL.b2 - Refer to details and examples in a text when explaining what the text says explicitly. 6.RL.b3 - Use specific	Recall details in a text.

		details from the text (words, interactions, thoughts, and motivations) to support inferences or conclusions about characters, including how they change during the course of the story. 6.RL.b4 - Use the specific details from the text to support inferences and explanations about plot development.	Identify characters in a story.
Reading Literature: Key Ideas & Details	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.	6.RL.c1 - Select key details about a character and relate those details to a theme within the text. 6.RL.c2 - Determine the theme(s) of a story, drama, or poem including how it is conveyed through particular details. 6.RL.c3 - Summarize a text from beginning to end in a few sentences without including personal opinions.	Identify what happens in the beginning and ending of a story.
Reading Literature: Key Ideas & Details	3. Describe how the plot of a particular story or drama unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	6.RL.b1 - Describe how the plot unfolds in a story. 6.RL.d1 - Analyze a character's interactions throughout a story as they relate to conflict and resolution.	
Reading Literature: Craft and Structure	4. Determine the meaning of words and phrases as they are used in a text, including figurative and	6.RWL.e3 - Determine the meaning of words and phrases as they are used in a text, including figurative (i.e.,	

	connotative meanings; analyze the impact of a specific word choice on meaning and tone. (See grade 6 Language standards 4–6 for additional expectations.) (CA)	metaphors, similes, and idioms) and connotative meanings.	
Reading Literature: Craft and Structure	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.	6.RL.e1 - 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.	
Reading Literature: Craft and Structure	6. Explain how an author develops the point of view of the narrator or speaker in a text.	6.RL.f1 - Determine the narrative point of view. 6.RL.f2 - Identify and describe how the narrative point of view influences the reader's interpretation. 6.RL.f3 - Explain how an author develops the point of view of the narrator or speaker in a text.	
Reading Literature: Integration of Knowledge & Ideas	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 vs. what they perceive when they listen or watch.	6.RL.e3 - Compare the experience of reading a story or drama to listening to or viewing an audio, video, or live version of the text.	

Reading Literature: Integration of Knowledge & Ideas	8. 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.	6.RL.e2 - Compare texts from different genres that have a similar theme or address the same topic.	
Reading Literature: Range of Reading & Level of Text Complexity	9. By the end of the year, proficiently read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band, with scaffolding as needed at the high end of the range.	6.HD.a1 - Read or be read a variety of texts or adapted texts including historical novels, fantasy stories and novels, poetry, fiction, and nonfiction novels. 6.RL.a1 - Use a variety of strategies to derive meaning from a variety of texts.	

Reading: Informational Text

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Informational Text: Key Ideas & Details	1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	6.RI.d2 - Use textual evidence to support inferences.	
Reading Informational Text: Key Ideas & Details	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.	6.RI.c2 - Provide a summary of the text distinct from personal opinions or judgments.	Identify the main idea of a text.

Reading Informational Text: Key Ideas & Details	3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated upon in a text (e.g., through examples or anecdotes).	6.RI.g1 - Identify key individuals, events, or ideas in a text. 6.RI.g2 - Determine how key individuals, events, or ideas are introduced in a text. 6.RI.g3 - Determine how key individuals, events, or ideas are illustrated in a text. 6.RI.g4 - Determine how key individuals, events, or ideas are elaborated or expanded on in a text.	Identify a description of an event or individual in a text.
Reading Informational Text: Craft and Structure	4. Determine the meanings of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. (See grade 6 Language standards 4–6 for additional expectations.) (CA)	6.RWL.e3 - Determine the meanings of words and phrases as they are used in a text, including figurative (i.e., metaphors, similes, and idioms) and connotative meanings.	
Reading Informational Text: Craft and Structure	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. Analyze the use of text features (e.g., graphics, headers, and captions) in popular media. (CA)	(None)	
Reading Informational Text: Craft and Structure	6. Determine an author's point of view or purpose in a text and explain how it is conveyed.	6.RI.e1 - Determine an author's point of view or purpose in a text and explain how it is conveyed.	

Reading Informational Text: Integration of Knowledge and Ideas	7. Integrate information presented in different media or formats (e.g., visually or quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	6.RI.b3 - Identify what is learned from different media or formats compared to what is learned via written words or spoken words. 6.RI.b4 - Summarize information gained from a variety of sources, including media or texts. 6.RI.f1 - Identify relevant details from several texts on the same topic (e.g., what are the important things that you learned?).	Identify a topic from a single source.
Reading Informational Text: Integration of Knowledge and Ideas	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.	6.RI.g5 - Identify an argument or claim that the author makes. 6.RI.g6 - Evaluate the claim or argument; determine if it is supported by evidence. 6.RI.g7 - Distinguish claims or arguments from those that are supported by evidence from those that are not.	Identify a fact from the text.
Reading Informational Text: Integration of Knowledge and Ideas	9. Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography about the same person).	6.RI.e3 - Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography about the same person).	
Reading Informational Text: Range of Reading & Level of Text Complexity	10. By the end of the year, proficiently read and comprehend literary nonfiction in the grades 6–8 text complexity band, with scaffolding as needed at the high end of the range.	6.HD.a1 - Read or be read a variety of texts including historical novels, fantasy stories and novels, poetry, fiction, and nonfiction novels. 6.RI.a1 - Use a variety of strategies (e.g., use	

		context, affixes, and roots) to derive meaning from a variety of print and non-print texts.	

Writing

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Writing: Texts Types & Purposes	1. Write arguments to support claims with clear reasons and relevant evidence. A. Introduce claim(s) and organize the reasons and evidence clearly. B. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. C. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. D. Establish and maintain a formal style. E. Provide a concluding statement or section that follows the argument presented.	6.WP.c1 - Write an introduction that introduces the writer's claim within persuasive text. 6.WP.c2 - Create an organizational structure in which ideas are logically grouped to support the writer's claim. 6.WP.d1 - Write arguments to support claims with clear reasons and relevant evidence from credible sources. 6.WP.e1 - Use words, phrases, and clauses to link claims and reasons. 6.WP.g1 - Provide a concluding statement or section that follows the argument presented. 6.WP.a2 - Distinguish claims presented orally or in writing that are supported by reasons and claims that are not.	

Writing: Texts Types & Purposes	2. Write informative or explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. A. Introduce a topic or thesis statement; organize ideas, concepts, and information using strategies such as definition, classification, comparison and contrast, or cause and effect; include formatting (e.g., headings), graphics (e.g., charts or tables), and multimedia when useful to aid comprehension. B. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. C. Use appropriate transitions to clarify the relationships among ideas and concepts. D. Use precise language and domain-specific vocabulary to inform about or explain the topic. E. Establish and maintain a formal style. F. Provide a concluding statement or section that follows from the information or explanation presented.	6.WI.b2 - Organize ideas, concepts, and information (e.g., using definition, classification, comparison and contrast, or cause and effect). 6.WI.c1 - Write an introduction that includes context or background information and establishes a central idea or focus about a topic. 6.WI.d1 - Develop the topic (add additional information related to the topic) with relevant facts, definitions, concrete details, quotations, or other information and examples. 6.WI.f1 - Include formatting (e.g., headings), graphics (e.g., charts or tables), and multimedia when useful to promote reading understanding. 6.WI.e1 - Use transitional words, phrases, and clauses that connect ideas and create cohesion within writing. 6.WI.d2 - Use precise language and domain-specific vocabulary to inform about or explain the topic. 6.WI.e2 - Maintain a consistent style and voice throughout	

		writing. 6.WI.g1 - Provide a concluding statement or section that follows from and summarizes the information presented.	
Writing: Texts Types & Purposes	3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. 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. B. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. C. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. D. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. E. Provide a conclusion that follows from the	6.WL.b1 - Engage and orient the reader by establishing a context and introducing a narrator and/or characters. 6.WL.c1 - Organize ideas and events so that they unfold naturally. 6.WL.c2 - When appropriate, use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. 6.WL.c3 - Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. 6.WL.d1 - Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. 6.WL.g1 - Provide a conclusion that follows from the narrated experiences or events. 6.WL.f1 - Use figurative language	Match transition words, phrases, and clauses within a text.

	narrated experiences or events.	appropriately, including similes and metaphors.	
Writing: Production & Distribution of Writing	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.)	6.WI.h2 - Produce a clear, coherent, permanent product that is appropriate to the specific task (e.g., topic), purpose (e.g., to inform, entertain, or persuade), and audience (e.g., reader).	Given a specific purpose, produce a permanent product (e.g., select text appropriate to the purpose, identify descriptive sentences, and select a concluding statement).
Writing: Production & Distribution of Writing	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.)	6.WP.b1 - With guidance and support from peers and adults, develop a plan for writing (e.g., define purpose, which is to persuade, state your claim, gather evidence, create your argument, and provide a meaningful conclusion). 6.WL.a1 - With guidance and support from peers and adults, develop a plan for writing (e.g., choose a topic, introduce story elements, develop storyline, and conclude story). 6.WI.b1 - With guidance and support from peers and adults, develop a plan for writing (e.g., determine the topic, gather information, develop the topic, and provide a meaningful conclusion).	

		6.WP.h2 - With guidance and support from peers and adults, strengthen writing by revising and editing. 6.WL.h2 - With guidance and support from peers and adults, strengthen writing as needed by revising and editing (e.g., review product, strengthening story).	
Writing: Production & Distribution of Writing	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.	6.WA.1 - Use technology to produce and publish writing. (e.g., use the internet to gather information; use word processing to generate and collaborate on writing). 6.WA.2 - Develop sufficient keyboarding skills.	
Writing: Research to Build & Present Knowledge	7. Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	6.WI.b3 - Follow steps to complete a short research project (e.g., determining topic, locating information on a topic, organizing information related to the topic, and drafting a permanent product).	
Writing: Research to Build & Present Knowledge	8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	6.WP.b2 - Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print and/or digital sources. 6.WP.b4 - Quote or paraphrase the data and conclusions of others in writing while avoiding plagiarism. 6.WP.b3 - Provide a	

		bibliography for sources that contributed to the content within a writing piece.	
Writing: Research to Build & Present Knowledge	9. Draw evidence from literary or informational texts to support analysis, reflection, and research. 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"). 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").	6.WP.a1 - Analyze mentor texts to support knowledge of persuasive writing (e.g., analyze newspaper editorials to explore the way the author developed the argument).	
Writing: Range of Writing	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.	(None)	

Speaking & Listening

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Speaking & Listening: Comprehension & Collaboration	1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly. A. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. B. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. C. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. D. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing	6.HD.e1 - Make appropriate comments that contribute to a collaborative discussion. 6.HD.e2 - Review the key ideas expressed within a collaborative discussion, linking multiple perspectives together.	
Speaking & Listening: Comprehension &	2. Interpret information presented in diverse media and formats	6.RI.c3 - Interpret information presented in diverse media and	

Collaboration	(e.g., visually, quantitatively, or orally) and explain how it contributes to a topic, text, or issue under study.	formats (e.g., visually, quantitatively, or orally). 6.RI.c4 - Explain how information gained via diverse media and formats contributes to the understanding of a topic, text, or issue under study.	
Speaking & Listening: Comprehension & Collaboration	3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	6.RI.c5 - Summarize the points a speaker makes. 6.RI.e2 - Summarize the points an author makes. 6.RI.g7 - Distinguish claims or arguments from those that are supported by evidence from those that are not. 6.WP.a2 - Distinguish claims presented orally or in writing that are supported by reasons and claims that are not.	
Speaking & Listening: Presentation of Knowledge & Ideas	4. Present claims and findings (e.g., argument, narrative, informative, response to literature presentations), sequencing ideas logically and using pertinent descriptions, facts, and details as well as nonverbal elements to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. A. Plan and deliver an informative or explanatory presentation that develops a topic with	6.WA.3 - Report on a topic, story or claim with a logical sequence of ideas, appropriate facts, and relevant, descriptive details.	

	relevant facts, definitions, and concrete details; uses appropriate transitions to clarify relationships; uses precise language and domain-specific vocabulary; and provides a strong conclusion. (CA)		
Speaking & Listening: Presentation of Knowledge & Ideas	5. Include multimedia components (e.g., graphics, images, music, and sound) and visual displays in presentations to clarify information.	6.WA.4 - Include multimedia components (e.g., graphics, images, music, and sound) and visual displays in presentations to clarify information 6.WA.5 - Use captioned pictures, labeled diagrams, tables, or other visual displays in presentations when appropriate to support the topic or theme.	
Speaking & Listening: Presentation of Knowledge & Ideas	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 for specific expectations.)	(None)	

Language

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Language: Conventions of Standard English	1. Demonstrate command of the conventions of standard English grammar and usage	6.WA.7 - Identify and use pronouns accurately in writing. 6.WA.6 - Use strategies	

	when writing or speaking. A. Ensure that pronouns are in the proper case (subjective, objective, or possessive). B. Use all pronouns, including intensive pronouns (e.g., *myself, ourselves*) correctly. (CA) C. Recognize and correct inappropriate shifts in pronoun number and person. D. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). 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.	(e.g., clarify language and grammar, vary sentence patterns, and maintain consistent tone and style) to improve written expression in conventional language.	
Language: Conventions of Standard English	2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. A. Use punctuation (commas, parentheses, and dashes) to set off nonrestrictive or parenthetical elements. B. Spell correctly.	6.WA.8 - Use commas, parentheses, and/or dashes in writing to set off nonrestrictive or parenthetical elements. 6.WA.9 - Spell words correctly in writing.	

Language: Knowledge of Language	3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. A. Vary sentence patterns for meaning, reader or listener interest, and style. B. Maintain consistency in style and tone.	6.WA.10 - Vary sentence patterns for meaning, reader interest, and style within writing.	
Language: Vocabulary Acquisition and Use	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. 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. B. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience, auditory, audible*). C. Consult reference materials (e.g., dictionaries, glossaries, and thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. D. Verify the preliminary	6.RWL.a1 - Use context to determine the meaning of unknown words or words with multiple meanings. 6.RWL.b1 - Use common, grade-appropriate roots and affixes as clues to the meaning of a word. 6.RWL.d2 - Consult reference materials (e.g., dictionaries, glossaries, and thesauruses) to find the pronunciation of a word. 6.RWL.d3 - Consult reference materials (e.g., dictionaries, glossaries, and thesauruses) to find the synonym for a word. 6.RWL.d4 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word.	Identify words with multiple meanings.

	determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	6.RWL.d1 - Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).	
Language: Vocabulary Acquisition and Use	5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. A. Interpret figures of speech (e.g., personification) in context. B. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. C. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, unwasteful, thrifty*).	6.RWL.e1 - Explain the meaning of figures of speech (e.g., personification, idioms, and proverbs) in context. 6.RWL.k2 - Interpret figures of speech (e.g., personification or allusions) in context. 6.WL.f1 - Use figurative language appropriately, including similes and metaphors. 6.WA.11 - Use the relationship between particular words (e.g., synonyms, antonyms, and homographs) in writing to promote understanding of each of the words. 6.RWL.a2 - Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words. 6.RWL.e2 - Identify the connotative meaning (the idea associated with the word) of a word or phrase.	
Language: Vocabulary Acquisition and Use	6. Acquire and use accurately grade-appropriate, general academic and domain-specific words	6.WA.12 - Use grade-appropriate, general academic and domain-specific words and phrases accurately	Identify general academic words.

	and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	within writing. 6.RWL.c1 - Use general academic and domain-specific words and phrases accurately.	

7th Grade

Math

Ratios and Proportional Relationships

Standards for Math	CCSS	CCCs	Essential Understandings
Analyze proportional relationships and use them to solve real-world and mathematical problems.	1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. *For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction ½/¼ miles per hour, equivalently 2 miles per hour.*	7.NO.2f3 - Find unit rates given a ratio. 7.PRF.1e1 - Determine unit rates associated with ratios of lengths, areas, and other quantities measured in like units. 7.ME.2e2 - Solve one-step problems involving unit rates associated with ratios of fractions.	
Analyze proportional relationships and use them to solve real-world and mathematical	2. Recognize and represent proportional relationships between quantities. A. Decide whether two quantities are in a proportional relationship,	7.NO.2f1 - Identify the proportional relationship between two quantities (use rules or symbols to show quantitative relationships).	Recognize the constancy of one object to its parts (i.e., one face, two eyes). Use a table to recognize the

problems.	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. B. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. C. Represent proportional relationships by equations. *For 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.NO.2f2 - Determine if two quantities are in a proportional relationship using a table of equivalent ratios or points graphed on a coordinate plane. 7.PRF.1e2 - Represent proportional relationships on a line graph. 7.NO.2f4 - Use a rate of change or proportional relationship to determine the points on a coordinate plane.	quantity of two entries, without counting, to determine which is relatively larger.
Analyze proportional relationships and use them to solve real-world and mathematical problems.	3. Use proportional relationships to solve multi-step ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*	7.NO.2h1 - Find percents in real-world contexts. 7.NO.2h2 - Solve one-step percentage increase and decrease problems. 7.NO.2f5 - Use proportions to solve ratio problems. 7.NO.2f6 - Solve word	Show rate when asked; show proportion when asked; select a set for the ratio given (*For example: Maria stamps three letters every minute, which we write as 3:1. Show the letters she stamps in a minute*).

		problems involving ratios. 7.PRF.1f1 - Use proportional relationships to solve multi-step percent problems in real-world situations.	Identify how one variable changes in relation to another variable in a directly proportional relationship (e.g., a/b = c/d, so if a increases, what will happen to c?).

The Number System

Standards for Math	CCSS	CCCs	Essential Understandings
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	1. 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. A. Describe situations in which opposite quantities combine to make 0. *For 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	7.NO.1g1 - Identify the additive inverse of a number (e.g., -3 and +3). 7.NO.1g2 - Identify the difference between two given numbers on a number line using absolute value. 8.NO.2i3 - Solve one-step addition, subtraction, multiplication, and division problems with fractions, decimals, and positive/negative numbers. 8.NO.2i4 - Solve two-step addition, subtraction, multiplication, and division problems with fractions, decimals, or positive/negative numbers.	

	inverses). Interpret sums of rational numbers by describing real-world contexts. 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. D. Apply properties of operations as strategies to add and subtract rational numbers.		
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. 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. B. Understand that integers can be divided, provided that the	7.NO.2i1 - Solve multiplication problems with positive/negative numbers. 7.NO.2i2 - Solve division problems with positive/negative numbers.	Create an array of objects for the mathematical equation and match the answer symbol (+ or -) following multiplication rules for an equation. Create an array of objects for the mathematical equation and match the answer symbol (+ or -) following division rules for an equation.

	divisor is not zero, and every quotient of integers (with non-zero 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. C. Apply properties of operations as strategies to multiply and divide rational numbers. D. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0 or eventually repeats.		
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	3. 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.)	8.NO.2i3 - Solve one-step addition, subtraction, multiplication, and division problems with fractions, decimals, and positive/negative numbers. 8.NO.2i4 - Solve two-step addition, subtraction, multiplication, and division problems with fractions, decimals, or positive/negative numbers.	

Expressions and Equations

Standards for Math	CCSS	CCCs	Essential Understandings

Use properties of operations to generate equivalent expressions.	1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	7.SE.1f3 - Add and subtract linear expressions. 7.SE.1f4 - Factor and expand linear expressions.	
Use properties of operations to generate equivalent expressions.	2. 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. *For example, a + 0.05a = 1.05a means that "increase by 5%" is the same as "multiply by 1.05."*	(None)	
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	3. Solve multi-step, 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. *For example: 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. Another example: If you want to*	7.PRF.1g1 - Solve real-world, multi-step problems using whole numbers.	

	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.		
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	4. Use variables to represent quantities in a real-world or mathematical problem; construct simple equations and inequalities to solve problems by reasoning about the quantities. 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. *For 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. *For example: As a*	7.SE.1f2 - Solve equations with one variable based on real-world problems. 7.PRF.1g2 - Use variables to represent quantities in a real-world or mathematical problem;construct simple equations and inequalities to solve problems by reasoning about the quantities. 7.PRF.2d - Use a calculator to 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.	Record or replace a variable in an equation with a fact from a story on a graphic organizer.

	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.		

Geometry

Standards for Math	CCSS	CCCs	Essential Understandings
Draw, construct, and describe geometrical figures and describe the relationships between them.	1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	7.ME.1d1 - Solve problems that use proportional reasoning with ratios of length and area. 7.ME.2e1 - Solve one-step, real-world problems related to scaling.	
Draw, construct, and describe geometrical figures and describe the relationships between them.	2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	7.GM.1e1 - Construct or draw plane figures using properties.	
Draw, construct, and describe geometrical figures and describe the relationships between them.	3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	7.GM.1h5 - Describe the two-dimensional figures that result from a decomposed three-dimensional figure.	

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	4. Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	7.ME.2d1 - Apply the formulas to measure area and circumference of circles.	Recognize the area of a circle and the circumference when shown a graphic representation.
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	8.GM.1i1 - Identify supplementary angles. 8.GM.1i2 - Identify complementary angles. 8.GM.1i3 - Identify adjacent angles. 8.GM.1i4 - Use angle relationships to find the value of a missing angle.	
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	6. Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	7.GM.1h1 - Add the area of each face of a prism to find the surface area of three-dimensional objects. 7.GM.1h2 - Find the surface area of three-dimensional figures using nets of rectangles or triangles. 7.GM.1h3 - Find the area of plane figures and the surface area of solid figures (quadrilaterals). 7.GM.1h4 - Find the area of equilateral, isosceles, and scalene triangles. 7.ME.2c1 - Solve one-step, real-world measurement problems involving area, volume, or surface area of two- and three-dimensional objects.	Demonstrate the concept of the surface area of a rectangular prism.

Statistics and Probability

Standards for Math	CCSS	CCCs	Essential Understandings
Use random sampling to draw inferences about a population.	1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	7.DPS.1b1 - Determine sample size to answer a given question.	
Use random sampling to draw inferences about a population.	2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*	7.DPS.1k1 - Analyze graphs to determine or select appropriate comparative inferences about two samples or populations.	Understand basic information from simple graphs (e.g., interpret a bar graph using the understanding that the taller column on a graph has a higher frequency, and the shorter column on a graph has a lower frequency).

Draw informal comparative inferences about two populations.	3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*	7.DPS.1j1 - Make or select a statement to compare the distribution of two data sets.	
Draw informal comparative inferences about two populations.	4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*	7.DPS.1i2 - Identify the range (high/low), median (middle), mean, or mode of a given data set. 7.DPS.1k1 - Analyze graphs to determine or select appropriate comparative inferences about two samples or populations. 7.DPS.1j2 - Make or select an appropriate statement based upon two unequal data sets using measures of central tendency and shape.	
Investigate chance processes and develop, use, and evaluate probability models.	5. Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate	7.DPS.2d1 - Describe the probability of events as being certain or impossible, likely, less likely, or equally likely. 7.DPS.2d2 - State the	

	greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	theoretical probability of events occurring in terms of ratios (words, percentages, decimals).	
Investigate chance processes and develop, use, and evaluate probability models.	6. Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency; predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times but probably not exactly 200 times.*	7.DPS.2d4 - Make a prediction regarding the probability of an event occurring; conduct simple probability experiments.	
Investigate chance processes and develop, use, and evaluate probability models.	7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. A. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will*	7.DPS.2d5 - Compare actual results of simple experiments with theoretical probabilities.	

	be selected. B. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*		
Investigate chance processes and develop, use, and evaluate probability models.	8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. A. Understand that just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. B. Represent sample spaces for compound events using methods such as organized lists, tables, and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space that compose the event. C. Design and use a simulation to generate frequencies for compound events. *For example, use*	7.DPS.2e1 - Determine the theoretical probability of multistage probability experiments (2 coins, 2 dice). 7.DPS.2e2 - Collect data from multistage probability experiments (2 coins, 2 dice). 7.DPS.2e3 - Compare actual results of multistage experiments with theoretical probabilities.	

	random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?		

English Language Arts

Reading: Literature

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Literature: Key Ideas & Details	1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	7.RL.i1 - Refer to details and examples in a text when explaining what the text says explicitly. 7.RL.i2 - Use two or more pieces of textual evidence to support conclusions or summaries of text.	Make an inference from a literary text.
Reading Literature: Key Ideas & Details	2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	7.RL.i3 - Determine the theme or central idea of a text. 7.RL.j1 - Analyze the development of the theme or central idea over the course of the text.	Identify the theme or central idea of the text.
Reading Literature: Key Ideas &	3. Analyze how particular elements of a story or drama	7.RL.j2 - Analyze the impact of story elements on the text	

Details	interact (e.g., how the setting shapes the characters or plot).	(e.g., impact of the setting on a character's choices, cause/effect within the text). 7.RL.k1 - Analyze how particular elements of a story or drama interact (e.g., how the setting shapes the characters or plot).	
Reading Literature: Craft and Structure	4. 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. (See grade seven Language standards "Vocabulary Acquisition and Use" for additional expectations.) (CA)	7.RWL.k4 - Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. 7.RWL.l1 - Identify alliteration within text. 7.RWL.l2 - Analyze how the use of rhymes or repetitions of sounds affect the tone of the poem, story, or drama.	
Reading Literature: Craft and Structure	5. Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.	7.RL.l1 - Examine how the structure of a poem or drama adds to its meaning.	
Reading Literature: Craft and Structure	6. Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	7.RL.m1 - Compare and contrast the points of view of different characters in the same text.	
Reading Literature: Integration of Knowledge & Ideas	7. Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques	7.RL.m2 - Compare and contrast a story, drama, or poem when presented in two different mediums. 7.RL.m3 - Compare and	

	unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	contrast different mediums that may be used to present literary materials to explore the techniques used in the various mediums.	
Reading Literature: Integration of Knowledge & Ideas	8. Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.	7.RL.m4 - Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.	
Reading Literature: Range of Reading & Level of Text Complexity	9. By the end of the year, proficiently read and comprehend literature, including stories, dramas, and poems, in the grades six to eight text complexity band, with scaffolding as needed at the high end of the range.	7.HD.g1 - Read or be read a variety of texts or adapted texts including historical novels, periodicals, dramas or plays, poetry (including soliloquies and sonnets), fiction, and nonfiction novels. 7.RL.h1 - Use a variety of strategies to derive meaning from a variety of literary texts.	

Reading: Informational Text

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Informational Text: Key Ideas & Details	1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from	7.RI.j1 - Use two or more pieces of evidence to support inferences, conclusions, or summaries of text.	Identify a conclusion from an informational text.

	the text.		
Reading Informational Text: Key Ideas & Details	2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.	7.RI.j2 - Determine the central idea of a text. 7.RI.j3 - Analyze the development of the central idea over the course of the text. 7.RI.j4 - Create an objective summary of a text.	
Reading Informational Text: Key Ideas & Details	3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	7.RI.j5 - Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	Identify the relationship between people, events, and ideas in a text.
Reading Informational Text: Craft and Structure	4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone. (See grade seven Language standards "Vocabulary Acquisition and Use" for additional expectations.) (CA)	7.RWL.k4 - Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. 7.RWL.l3 - Analyze how the use of figurative, connotative, or technical terms affects the meaning or tone of text.	
Reading Informational Text: Craft and Structure	5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas. A. Analyze the use of text features (e.g.,	7.RI.i1 - Use signal words as a means of locating information. 7.RI.i3 - Outline a given text to show how ideas build upon one another. 7.RI.k1 - Determine the structure of a text. 7.RI.k2 - Determine how	

	graphics, headers, captions) in public documents. (CA)	the information in each section contributes to the whole or to the development of ideas.	
Reading Informational Text: Craft and Structure	6. Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	7.RI.k6 - Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	
Reading Informational Text: Integration of Knowledge and Ideas	7. Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).	7.RI.l1 - Compare and contrast how two or more authors write or present about the same topic.	
Reading Informational Text: Integration of Knowledge and Ideas	8. Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	7.RI.k3 - Identify an argument or claim that the author makes. 7.RI.k4 - Evaluate the claim or argument to determine if they are supported by evidence. 7.RI.k5 - Distinguish claims or arguments that are supported by evidence from those that are not.	Identify a claim from a text.
Reading Informational Text: Integration of Knowledge and Ideas	9. 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.	7.RI.j6 - Use supporting evidence to summarize central ideas, draw inferences, or analyze connections within or across texts. 7.RI.l1 - Compare and contrast how two or more authors write about the same topic. (Requires paired	Identify two texts on the same topic. Compare and contrast two statements related to a single detail within the topic.

		passages.) 7.RI.I2 - 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.	
Reading Informational Text: Range of Reading & Level of Text Complexity	10. By the end of the year, proficiently read and comprehend literary nonfiction in the grades six to eight text complexity band, with scaffolding as needed at the high end of the range.	7.HD.g1 - Read or be read a variety of texts including historical novels, periodicals, dramas or plays, poetry (including soliloquies and sonnets), fiction and nonfiction novels. 7.RI.h1 - Use a variety of strategies (e.g., use context, affixes and roots, reference materials) to derive meaning from a variety of print and non-print texts.	

Writing

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Writing: Texts Types & Purposes	1. Write arguments to support claims with clear reasons and relevant evidence. A. Introduce claim(s), acknowledge and address alternate or opposing claims, and organize the reasons and evidence logically.	7.WP.k1 - Write an introduction that introduces the writer's claims and acknowledges alternate or opposing claims. 7.WP.k2 - Create an organizational structure in which ideas are	

	(CA) B. Support claim(s) or counter arguments with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. (CA) C. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. D. Establish and maintain a formal style. E. Provide a concluding statement or section that follows from and supports the argument presented.	logically grouped to support the writer's claim. 7.WP.l1 - Write arguments to support claims with logical reasoning and relevant evidence from credible sources. 7.WP.l2 - Use words, phrases, and clauses to link opinions and reasons and clarify the relationship of ideas. 7.WP.m1 - Maintain a consistent style and voice throughout writing. 7.WP.n1 - Provide a concluding statement or section that supports and summarizes the argument presented.	
Writing: Texts Types & Purposes	2. Write informative or explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. A. Introduce a topic or thesis statement clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/ contrast, and	7.WI.j2 - Organize ideas, concepts, and information (using definition, classification, comparison/ contrast, and cause/effect). 7.WI.j3 - Write an introduction that clearly previews information to follow. 7.WI.m1 - Develop the topic (add additional information related to the topic) with relevant facts, definitions, concrete details, quotations, or other information and examples.	

	cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. (CA) B. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. C. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. D. Use precise language and domain-specific vocabulary to inform about or explain the topic. E. Establish and maintain a formal style. F. Provide a concluding statement or section that follows from and supports the information or explanation presented.	7.WI.k1 - Use transitional words, phrases, and clauses that connect ideas and create cohesion within writing. 7.WI.l1 - Use precise language and domain-specific vocabulary to inform about or explain the topic. 7.WI.l2 - Maintain a consistent style and voice throughout writing. 7.WI.n1 - Provide a concluding statement or section that follows from and supports the information presented. 7.WI.m2 - Present claims and findings, emphasizing salient points in a coherent manner with pertinent descriptions, facts, details, and examples. 7.WI.o3 - Report on a topic, with a logical sequence of ideas, appropriate facts, and relevant and descriptive details that support the main ideas.	
Writing: Texts Types & Purposes	3. Write narratives to develop real or imagined experiences or events using effective techniques, relevant and descriptive details, and well-structured event sequences. A. Engage and orient the reader by	7.WL.j1 - Orient the reader by establishing a context and point of view and introducing the narrator and/or characters. 7.WL.k1 - Organize ideas and events so that they unfold naturally. 7.WL.k2 - When	Identify a visual image to match provided text.

	establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. B. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. C. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. D. Use precise words and phrases, relevant and descriptive details, and sensory language to capture the action and convey experiences and events. E. Provide a conclusion that follows from and reflects on narrated experiences or events.	appropriate, use narrative techniques such as dialogue, pacing, and description to develop experiences, events, and/or characters. 7.WL.k3 - Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. 7.WL.l1 - Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. 7.WL.o1 - Provide a conclusion that follows from the narrated experiences or events. 7.WL.n1 - Use words, phrases, or gathered information to accurately reflect literary context.	
Writing: Production & Distribution of Writing	4. Produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience. (Grade-specific expectations for writing types are defined in “Texts Types and Purposes” above.)	7.WI.o1 - Produce a clear, coherent, permanent product that is appropriate to the specific task (e.g., topic), purpose (e.g., to inform, to entertain, or to persuade), and audience (reader).	Given a specific purpose, produce a permanent product (e.g., select text appropriate to the purpose, identify descriptive sentences, and select a concluding statement).

Writing: Production & Distribution of Writing	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, focusing on how well the purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards "Conventions of Standard English and Knowledge of Language" sections up to and including grade seven.)	7.WP.j1 - With guidance and support from peers and adults, develop a plan for writing (e.g., define purpose, which is to persuade, state your claim, gather evidence, create your argument, provide a meaningful conclusion). 7.WL.i1 - With guidance and support from peers and adults, develop a plan for writing (e.g., choose a topic, introduce story elements, develop storyline, conclude story). 7.WI.j1 - With guidance and support from peers and adults, develop a plan for writing (e.g., determine the topic, gather information, develop the topic, provide a meaningful conclusion). 7.WP.p2 - With guidance and support from peers and adults, strengthen writing by revising and editing (e.g., review product, strengthen story).	
Writing: Production & Distribution of Writing	6. Use technology, including the internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	7.WA.3 - Use technology to produce and publish writing (e.g., use the internet to gather information; use word processing to generate and collaborate on writing).	
Writing: Research to Build & Present Knowledge	7. Conduct short research projects to answer a question,	7.WI.i5 - Follow steps to complete a short research project (e.g.,	

	drawing on several sources and generating additional related, focused questions for further research and investigation.	determining topic, locating information on a topic, organizing information related to the topic, drafting a permanent product).	
Writing: Research to Build & Present Knowledge	8. 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.	7.WP.j3 - List internet search terms for a topic of study or persuasive writing. 7.WP.j4 - Gather relevant information (e.g., highlight in text, quote or paraphrase from text or discussion) from print and/or digital sources. 7.WP.j6 - Quote or paraphrase the data and conclusions of others in writing while avoiding plagiarism. 7.WP.j7 - Use a standard format to write citations.	
Writing: Research to Build & Present Knowledge	9. Draw evidence from literary or informational texts to support analysis, reflection, and research. A. Apply grade seven Reading standards to literature (e.g., "Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). B. Apply grade seven	7.WA.2 - Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.	

	Reading standards to literary nonfiction (e.g. "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").		
Writing: Range of Writing	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.	(None)	

Speaking & Listening

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Speaking & Listening: Comprehension & Collaboration	1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade seven topics, texts, and issues, building on others' ideas and expressing their own clearly. A. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by	7.WP.j5 - Describe how the claims within a speaker's argument match their own argument. 7.WP.i1 - Discuss how their own view or opinion changes using new information provided by others. 7.HD.i1 - Use information and feedback to refine understanding or products. 7.HD.j1 - Use information and feedback to refine own thinking.	

	referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. B. Follow the rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. 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. D. Acknowledge new information expressed by others and, when warranted, modify their own views.		
Speaking & Listening: Comprehension & Collaboration	2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	7.HD.h1 - Critically evaluate main ideas and details presented in diverse media (e.g., visually, personal communication, periodicals, social media) and formats for accuracy. 7.HD.h2 - Explain if and how ideas presented in diverse media (e.g., visually, personal communication, periodicals, social media) clarify a topic, text, or issue under study. 7.WP.j2 - Identify how information on a topic or text presented in	

		diverse media and formats (e.g., visually, quantitatively, orally) contributes to understanding.	
Speaking & Listening: Comprehension & Collaboration	3. Delineate a speaker's argument, specific claims, and attitude toward a subject, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. (CA)	7.HD.h3 - Evaluate the soundness of reasoning and the relevance and sufficiency of evidence provided in an argument. 7.WP.i2 - Evaluate the soundness or accuracy of reasons presented to support a claim.	
Speaking & Listening: Presentation of Knowledge & Ideas	4. Present claims and findings (e.g., argument, narrative, summary presentations), emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. A. Plan and present an argument that supports a claim, acknowledges the counter-arguments, organizes evidence logically, uses words and phrases to create cohesion, and provides a concluding statement that supports the argument presented. (CA)	7.WI.m2 - Present claims and findings, emphasizing salient points in a coherent manner with pertinent descriptions, facts, details, and examples. 7.WI.o3 - Report on a topic with a logical sequence of ideas, appropriate facts, and relevant and descriptive details that support the main ideas.	
Speaking & Listening: Presentation of Knowledge & Ideas	5. Include multimedia components and visual displays in presentations to clarify claims and findings	7.WA.4 - Include multimedia components and visual displays in presentations to clarify	

	and emphasize salient points.	claims and findings and emphasize salient points.	
Speaking & Listening: Presentation of Knowledge & Ideas	6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade seven Language standards "Conventions of Standard English and Knowledge of Language" for specific expectations.)	(None)	

Language

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Language: Conventions of Standard English	1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. A. Explain the function of phrases and clauses in general and their function in specific sentences. B. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. C. Place phrases and	7.WA.6 - Use phrases and clauses accurately within a sentence. 7.WA.5 - Use simple, compound, complex, and compound-complex sentences within writing when appropriate.	

	clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.		
Language: Conventions of Standard English	2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. A. Use a comma to separate coordinate adjectives (e.g. "It was a fascinating, enjoyable movie" but not "He wore an old[,] green shirt"). B. Spell correctly.	7.WA.7 - Use commas to separate coordinate adjectives. 7.WA.8 - Spell words correctly in writing.	
Language: Knowledge of Language	3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. A. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.	7.WL.n1 - Use words, phrases, or gathered information to accurately reflect meaning. 7.WA.9 - Choose language that expresses ideas precisely and concisely by eliminating wordiness and redundancy.	
Language: Vocabulary Acquisition and Use	4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade seven reading and content, choosing flexibly from a range of strategies. A. Use context (e.g., the overall meaning of a sentence or paragraph, a word's position, or its function	7.RWL.g1 - Use context as a clue to determine the meaning of a grade- appropriate word or phrases.	Use context as a clue to determine the meaning of a word (e.g., EDL grade five or six).

	in a sentence) as a clue to the meaning of a word or phrase. B. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). C. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word, clarify its precise meaning, determine its part of speech, or trace the etymology of words. (CA) 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).	7.RWL.j2 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. 7.RWL.j3 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. 7.RWL.j4 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word. 7.RWL.j1 - Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).	
Language: Vocabulary Acquisition and Use	5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. A. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context. B. Use the relationship between particular words (e.g., synonym/ antonym, analogy) to better understand	7.RWL.k1 - Identify allusion within a text or media. 7.RWL.k2 - Interpret figures of speech (e.g., personification, allusions) in context. 7.RWL.k3 - Interpret figures of speech (e.g., allusions, verbal irony, puns) in context. 7.RWL.g2 - Use the relationship between particular words (e.g., synonym/antonym,	

	each of the words. C. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).	analogy) to better understand each of the words. 7.RWL.k3 - Identify the connotative meaning (the idea associated with the word) of a word or phrase. 7.RWL.f1 - Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., slim, skinny, scrawny, thin). 7.WL.n1 - Use words, phrases, or gathered information to accurately reflect literary context.	
Language: Vocabulary Acquisition and Use	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.	7.WA.10 - Use grade-appropriate, general academic, and domain-specific words and phrases accurately within writing. 7.RWL.i1 - Use general academic and domain specific words and phrases accurately.	

8th Grade

Math

The Number System

Standards for Math	CCSS	CCCs	Essential Understandings
Know that there are numbers that are not rational, and approximate them by rational numbers.	1. Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers, show that the decimal expansion repeats eventually, and convert a decimal expansion that repeats eventually into a rational number.	8.NO.1k1 - Identify π as an irrational number. 8.NO.1k2 - Round irrational numbers to the hundredths place.	
Know that there are numbers that are not rational, and approximate them by rational numbers.	2. Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of √2, show that √2 is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.*	8.NO.1k3 - Use approximations of irrational numbers to locate them on a number line.	Recognize how values/numbers can lie between whole number values on a number line.

Expressions and Equations

Standards for Math	CCSS	CCCs	Essential Understandings
Work with radicals and integer exponents.	1. Know and apply the properties of integer exponents to generate equivalent numerical expressions.	8.SE.1f5 - Use properties of integer exponents to produce equivalent expressions.	

	For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$		
Work with radicals and integer exponents.	2. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.	(None)	
Work with radicals and integer exponents.	3. Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities and to express how many times as much one is than the other. *For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.*	8.NO.1i1 - Convert a number expressed in scientific notation up to 10,000.	
Work with radicals and integer exponents.	4. Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been	8.NO.1j1 - Perform operations with numbers expressed in scientific notation.	

	generated by technology.		
Understand the connections between proportional relationships, lines, and linear equations.	5. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	8.PRF.1e2 - Represent proportional relationships on a line graph.	Recognize a positive relationship between two variables.
Understand the connections between proportional relationships, lines, and linear equations.	6. Use similar triangles to explain why the slope *m* is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at *b*.	(None)	
Analyze and solve linear equations and pairs of simultaneous linear equations.	7. Solve linear equations in one variable. A. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where *a* and *b* are different numbers).	8.PRF.1g3 - Solve linear equations in one variable.	Use manipulatives or a graphic organizer to solve a problem.

	B. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.		
Analyze and solve linear equations and pairs of simultaneous linear equations.	8. Analyze and solve pairs of simultaneous linear equations. A. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs because points of intersection satisfy both equations simultaneously. B. Solve systems of two linear equations in two variables algebraically and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.* C. Solve real-world and mathematical problems leading to linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*	8.PRF.1g4 - Solve systems of two linear equations in two variables and graph the results. 8.PRG.1g5 - Solve real-world and mathematical problems leading to two linear equations in two variables.	

Functions

Standards for Math	CCSS	CCCs	Essential Understandings
Define, evaluate, and compare functions.	1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (Function notation is not required in grade 8.)	8.PRG.2e1 - Distinguish between functions and non-functions using equations, graphs, or tables.	
Define, evaluate, and compare functions.	2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*	8.PRG.2e5 - Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*	
Define, evaluate, and compare functions.	3. Interpret the equation $y = mx + b$ as defining a linear function whose graph is a straight line; give examples of functions that are not linear. *For example, the function $A = s^2$ giving the area of a square as*	8.PRF.2c1 - Given two graphs, describe the function as linear and not linear.	

	a function of its side length is not linear because its graph contains the points (1,1), (2,4), and (3,9), which are not on a straight line.		
Use functions to model relationships between quantities.	4. Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (*x, y*) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models and in terms of its graph or a table of values.	8.PRF.2e2 - Identify the rate of change (slope) and initial value (y-intercept) from graphs.	Indicate the point on a line that crosses the y-axis.
Use functions to model relationships between quantities.	5. Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear, or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	8.PRF.2c1 - Given two graphs, describe the function as linear and not linear. 8.PRF.2e3 - Given a verbal description of a situation, create or identify a graph to model the situation. 8.PRF.2e4 - Given a graph of a situation, generate a description of the situation. 8.PRF.1f2 - Describe or select the relationship between the two quantities given a line graph of the situation.	Use a graph to recognize the quantity in two sets, without counting, to determine which is relatively larger.

Geometry

Standards for Math	CCSS	CCCs	Essential Understandings
Understand congruence and similarity using physical models, transparencies, or geometry software.	1. Verify experimentally the properties of rotations, reflections, and translations. A. Lines are taken to lines, and line segments are taken to line segments of the same length. B. Angles are taken to angles of the same measure. C. Parallel lines are taken to parallel lines.	8.GM.1f1 - Recognize a rotation, reflection, or translation of a figure. 8.GM.1d1 - Use the reflections, rotations, or translations in the coordinate plane to solve problems with right angles.	
Understand congruence and similarity using physical models, transparencies, or geometry software.	2. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	8.GM.1g1 - Recognize congruent and similar figures.	Demonstrate the concept of congruent and similar (e.g., match concrete examples of congruent shapes, match concrete examples of similar shapes).
Understand congruence and similarity using physical models, transparencies, or geometry software.	3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	8.GM.1f2 - Identify a rotation, reflection, or translation of a plane figure when given coordinates.	
Understand congruence and similarity using physical models, transparencies,	4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first	8.GM.1g1 - Recognize congruent and similar figures. 8.ME.1e1 - Describe the	Recognize how the space inside a figure increases when the sides are lengthened.

or geometry software.	by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings). 8.ME.1e2 - Compare area and volume of similar figures.	
Understand congruence and similarity using physical models, transparencies, or geometry software.	5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.*	8.GM.1i4 - Use angle relationships to find the value of a missing angle.	
Understand and apply the Pythagorean Theorem.	6. Explain a proof of the Pythagorean Theorem and its converse.	(None)	
Understand and apply the Pythagorean Theorem.	7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	8.ME.2f1 - Apply the Pythagorean theorem to determine lengths and distances in real-world situations. 8.GM.1j1 - Find the hypotenuse of a two-dimensional right triangle (Pythagorean Theorem). 8.GM.1j2 - Find the missing side lengths of a two-dimensional right triangle (Pythagorean	

		Theorem). 8.GM.1a1 - Find the hypotenuse of a two-dimensional right triangle (Pythagorean Theorem). 8.GM.1a2 - Find the missing side lengths of a two-dimensional right triangle (Pythagorean Theorem).	
Understand and apply the Pythagorean Theorem.	8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	8.GM.1a3 - Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	
Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres	9. Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	8.ME.2d2 - Apply the formula to find the volume of three-dimensional shapes (i.e., cubes, spheres, and cylinders).	Ability to recognize attributes of a three-dimensional shape.

Statistics and Probability

Standards for Math	CCSS	CCCs	Essential Understandings
Investigate patterns of association in bivariate data.	1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and	8.DPS.1g2 - Graph data using line graphs, histograms, or box plots. 8.DPS.1h1 - Graph bivariate data using scatter plots and identify possible associations between the variables. 8.DPS.1i3 - Using box	Locate points on the x-axis and y-axis of an adapted grid (not necessarily numeric).

	nonlinear association.	plots and scatter plots, identify data points that appear to be outliers.	
Investigate patterns of association in bivariate data.	2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	8.DPS.2g1 - Distinguish between a linear and non-linear association when analyzing bivariate data on a scatter plot.	
Investigate patterns of association in bivariate data.	3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*	8.DPS.2g2 - Interpret the slope and the y-intercept of a line in the context of a problem.	
Investigate patterns of association in bivariate data.	4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or	8.DPS.1k2 - Analyze displays of bivariate data to develop or select appropriate claims about those data. 8.DPS.1f3 - Construct a two-way table summarizing data on two categorical variables collected from the same subjects; identify possible association between the two variables.	Use graphic supports (e.g., highlighted transparency of an association) to identify the appropriate statement when given a relationship between two variables.

	columns to describe possible association between the two variables. *For example, collect data from students in your class on whether they have a curfew on school nights and whether they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*		

English Language Arts

Reading: Literature

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Literature: Key Ideas & Details	1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	8.RL.i1 - Refer to details and examples in a text when explaining what the text says explicitly. 8.RL.i2 - Use two or more pieces of evidence to support inferences, conclusions, or summaries of text. 8.RL.i3 - Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries of text.	Make an inference from a literary text.

Reading Literature: Key Ideas & Details	2. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	8.RL.j1 - Determine the theme or central idea of a text. 8.RL.j2 - Analyze the development of the theme or central idea over the course of the text including its relationship to the characters, setting, and plot. 8.RL.j3 - Provide an objective summary of a text.	Identify the theme or central idea of the text.
Reading Literature: Key Ideas & Details	3. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.	8.RL.j4 - Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character or provoke a decision. 8.RL.k1 - Identify the use of literary techniques within a text. 8.RL.k2 - Explain how the use of literary techniques within a text advances the plot or reveals aspects of a character.	
Reading Literature: Craft and Structure	4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. (See grade 8 Language standards Vocabulary Acquisition and Use for additional expectations.) (CA)	8.RWL.k4 - Identify and interpret an analogy within a text. 8.RWL.k5 - Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings.	

Reading Literature: Craft and Structure	5. Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.	8.RL.I1 - Compare and contrast the structure of two or more texts. 8.RL.I2 - Explain how language use contributes to the meaning of a poem or drama.	
Reading Literature: Craft and Structure	6. Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	8.RL.m2 - Analyze how differences in points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	
Reading Literature: Integration of Knowledge & Ideas	7. Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors. 8. (Not applicable to literature)	8.RL.m3 - Compare and contrast content presented in text, media, and live performance.	
Reading Literature: Integration of Knowledge & Ideas	9. Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.	8.RL.m4 - Compare modern works of literature to the texts from which they draw ideas**.**	
Reading Literature: Range of Reading & Level of Text Complexity	10. By the end of the year, proficiently and independently read and comprehend literature, including stories, dramas, and	8.HD.g1 - Read or be read a variety of texts or adapted texts including historical novels, periodicals, dramas	

	poems, at the high end of grades 6–8 text complexity band.	or plays, poetry (including soliloquies and sonnets), fiction, and nonfiction novels. 8.RL.h1 - Use a variety of strategies to derive meaning from a variety of texts.	

Reading: Informational Text

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Reading Informational Text: Key Ideas & Details	1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	8.RI.j1 - Use two or more pieces of evidence to support inferences, conclusions, or summaries of text. 8.RI.j2 - Determine which piece(s) of evidence provide the strongest support for inferences, conclusions, or summaries of text.	Make an inference from an informational text.
Reading Informational Text: Key Ideas & Details	2. Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.	8.RI.j3 - Determine two or more central ideas in a text. 8.RI.j4 - Analyze the development of the central ideas over the course of the text. 8.RI.j5 - Provide an objective summary of a text.	
Reading Informational Text: Key Ideas & Details	3. Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through	8.RI.j6 - Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons,	

	comparisons, analogies, or categories).	analogies, or categories).	
Reading Informational Text: Craft and Structure	4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. (See grade 8 Language standards Vocabulary Acquisition and Use for additional expectations.) (CA)	8.RWL.k4 - Identify and interpret an analogy within a text. 8.RWL.k5 - Determine the meaning of words and phrases as they are used in a text including figurative (i.e., metaphors, similes, and idioms) and connotative meanings. 8.RWL.l1 - Analyze how the use of figurative, connotative or technical terms affects the meaning or tone of text.	
Reading Informational Text: Craft and Structure	5. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept. A. Analyze the use of text features (e.g., graphics, headers, captions) in consumer materials. (CA)	8.RI.i1 - Use signal words as a means of locating information. 8.RI.i3 - Outline the structure (i.e., sentence that identifies key concept(s) or supporting details) within a paragraph. 8.RI.k1 - Determine the structure of a text. 8.RI.k2 - Determine how the information in each section contributes to the whole or to the development of ideas.	Identify supporting key details and key information within a paragraph.
Reading Informational Text: Craft and Structure	6. Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	8.RI.k3 - Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	

Reading Informational Text: Integration of Knowledge and Ideas	7. Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.	(None)	
Reading Informational Text: Integration of Knowledge and Ideas	8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	8.RI.k4 - Identify an argument or claim that the author makes. 8.RI.k5 - Evaluate the claim or argument to determine if it is supported by evidence.	Identify a fact from the text.
Reading Informational Text: Integration of Knowledge and Ideas	9. Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.	8.RI.I1 - Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.	Identify a similar topic in two texts.
Reading Informational Text: Range of Reading & Level of Text Complexity	10. By the end of the year, independently and proficiently read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band.	8.HD.g1 - Read or be read to a variety of texts including historical novels, periodicals, dramas or plays, poetry (including soliloquies and sonnets), fiction, and nonfiction novels. 8.RI.h1 - Use a variety of strategies (e.g., use context, affixes, roots, and reference materials) to derive meaning from a variety of print/non-print texts.	

Writing

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Writing: Texts Types & Purposes	1. Write arguments to support claims with clear reasons and relevant evidence. A. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. B. Support claim(s) with logical reasoning and relevant evidence using accurate, credible sources and demonstrating an understanding of the topic or text. C. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. D. Establish and maintain a formal style. E. Provide a concluding statement or section that follows from and supports the argument presented.	8.WP.k1 - Write an introduction that introduces the writer's claims and distinguishes it from alternate or opposing claims. 8.WP.k2 - Create an organizational structure in which ideas are logically grouped to support the writer's claims. 8.WP.l1 - Write arguments to support claims with logical reasoning and relevant evidence from credible sources. 8.WP.l2 - Use words, phrases and clauses to link opinions and reasons and clarify relationship of ideas. 8.WP.m1 - Maintain a consistent style and voice throughout writing 8.WP.n1 - Provide a concluding statement or section that supports and summarizes the argument presented.	Given a writer's claims, identify the writer's perspective on the topic (e.g., pro or con).
Writing: Texts Types & Purposes	2. Write informative or explanatory texts, including career development documents (e.g., simple business letters	8.WI.j2 - Create an organizational structure for writing that groups information logically (e.g., cause/effect, compare/contrast,	

	and job applications) to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. (CA) A. Introduce a topic or thesis statement clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts or tables), and multimedia when useful to aid comprehension. (CA) B. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. C. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. D. Use precise language and domain-specific vocabulary to inform about or explain the topic. E. Establish and maintain a formal style. F. Provide a concluding	descriptions and examples), to support paragraph focus. 8.WI.j3 - Write an introduction that clearly previews information to follow and summarizes stated focus. 8.WI.m1 - Develop the topic (e.g., add additional information related to the topic) with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. 8.WI.k1 - Use transitional words, phrases, and clauses that connect ideas and create cohesion within writing. 8.WI.l1 - Use precise language and domain-specific vocabulary to inform about or explain the topic. 8.WI.l2 - Maintain a consistent style and voice throughout writing. 8.WI.m2 - Present claims and findings, emphasizing salient points in a coherent manner with relevant evidence. 8WI.n1 - Provide a concluding statement or section that follows from and supports the information or explanation presented.	

	statement or section that follows from and supports the information or explanation presented.	8.WI.o3 - Report on a topic with logical, appropriate facts, and relevant, descriptive details that support the main ideas.	
Writing: Texts Types & Purposes	3. Write narratives to develop real or imagined experiences or events using effective techniques, relevant and descriptive details, and well-structured event sequences. A. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. B. Use narrative techniques such as dialogue, pacing, description, and reflection to develop experiences, events, and/or characters. C. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. D. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.	8.WL.j1 - Orient the reader by establishing a context and point of view and introducing a narrator and/or characters. 8.WL.k1 - Organize ideas and events so that they unfold naturally. 8.WL.k2 - When appropriate, use narrative techniques such as dialogue, pacing, and description to develop experiences, events, and/or characters. 8.WL.k3 - Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. 8.WL.l1 - Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. 8.WL.o1 - Provide a conclusion that follows from the narrated experiences or events. 8.WL.n1 - Use literary devices (e.g., similes, metaphors, hyperbole,	

	E. Provide a conclusion that follows from and reflects on the narrated experiences or events.	personification, imagery) in narrative writing.	
Writing: Production & Distribution of Writing	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 for Text Types and Purposes.)	8.WI.o1 - Produce a clear, coherent, permanent product that is appropriate to the specific task (e.g., topic), purpose (e.g., to inform), and audience. 8.WL.p1 - Produce a clear, coherent, permanent product that is appropriate to the specific task, purpose (e.g. to entertain), and audience. 8.WP.o1 - Produce a clear, coherent, permanent product that is appropriate to the specific task, purpose (e.g., to persuade), and audience.	Given a specific purpose, produce a permanent product (e.g., select text appropriate to the purpose, identify descriptive sentences, and select a concluding statement).
Writing: Production & Distribution of Writing	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, focusing on how well the purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 8.)	8.WP.j2 - With guidance and support from peers and adults, develop a plan for writing (e.g., define purpose, which is to persuade, state your claim, gather evidence, create your argument, provide a meaningful conclusion). 8.WL.i1 - With guidance and support from peers and adults, develop a plan for writing (e.g., choose a topic, introduce story elements, develop storyline, conclude story). 8.WI.j1 - With guidance	

		and support from peers and adults, develop a plan for writing (e.g., determine the topic, gather information, develop the topic, provide a meaningful conclusion). 8.WP.o2 - With guidance and support from peers and adults, strengthen writing by revising and editing.	
Writing: Production & Distribution of Writing	6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	8.WA1 - Use technology to produce and publish writing (e.g., use word processing to generate and collaborate on writing).	
Writing: Research to Build & Present Knowledge	7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	8.WI.i4 - Follow steps to complete a short research project (e.g., determining topic, locating information on a topic, organizing information related to the topic, and drafting a permanent product).	
Writing: Research to Build & Present Knowledge	8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard	8.WI.i1 - Gather information (e.g., highlight, quote or paraphrase from source) relevant to the topic from print and/or digital sources. 8.WI.i2 - Quote or paraphrase the data and conclusions of others in writing while avoiding plagiarism.	Identify sources of information relevant to the topic (e.g., print and/or digital).

	format for citation.	8.WI.i3 - Use a standard format to produce citations. 8.WP.j1 - Gather relevant information from print and or digital sources. 8.WP.j3 Quote or paraphrase the data and conclusions of others in writing while avoiding plagiarism. 8.WP.j4 - Use a standard format to write citations.	
Writing: Research to Build & Present Knowledge	9. Draw evidence from literary or informational texts to support analysis, reflection, and research. A. Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new"). B. Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").	8.WA2 - Provide evidence from grade-appropriate literary or informational texts to support analysis, reflection, and research.	

Writing: Range of Writing	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.	(None)	

Speaking & Listening

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Speaking & Listening: Comprehension & Collaboration	1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. 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. B. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.	8.HD.i1 - Use information and feedback to refine understanding. 8.HD.j1 - Use information and feedback to clarify meaning for readers. 8.WP.i1 - Discuss how one's own view or opinion changes using new information provided by others.	

	C. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. D. Acknowledge new information expressed by others and, when warranted, qualify or justify own views in light of the evidence presented.		
Speaking & Listening: Comprehension & Collaboration	2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.	8.HD.h1 - Analyze the purpose of information presented in diverse media (e.g., visually, personal communication, periodicals, social media). 8.HD.h2 - Identify the motives behind information presented in diverse media and formats (e.g., visually, personal communication, periodicals, social media). 8.WP.i2 - Evaluate the motives and purpose behind information presented in diverse media and format for persuasive reasons.	
Speaking & Listening: Comprehension & Collaboration	3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when	8.HD.h3 - Evaluate the soundness of reasoning and the relevance and sufficiency of evidence provided in an argument. 8.HD.h4 - Identify when	

	irrelevant evidence is introduced.	irrelevant evidence is introduced within an argument. 8.WP.i3 - Evaluate the soundness or accuracy (e.g., multiple sources to validate information) of reasons presented to support a claim.	
Speaking & Listening: Presentation of Knowledge & Ideas	4. Present claims and findings (e.g., argument, narrative, response to literature presentations), emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. (CA) A. Plan and present a narrative that establishes a context and point of view, presents a logical sequence, uses narrative techniques (e.g., dialogue, pacing, description, sensory language), uses a variety of transitions, and provides a conclusion that reflects the experience. (CA)	8.WI.m2 - Present claims and findings, emphasizing salient points in a coherent manner with relevant evidence. 8.WI.o3 - Report on a topic, with a logical sequence of ideas, appropriate facts, and relevant, descriptive details that support the main ideas.	
Speaking & Listening: Presentation of Knowledge & Ideas	5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	8.WA.3 - Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	

Speaking & Listening: Presentation of Knowledge & Ideas	6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards Conventions of Standard English #1 and Knowledge of Language for specific expectations.)	(None)	

Language

Standards for English Language Arts	CCSS	CCCs	Essential Understandings
Language: Conventions of Standard English	1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. A. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. B. Form and use verbs in the active and passive voice. C. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood. D. Recognize and correct inappropriate shifts in verb voice and mood.	8.WA.4 - Use active and passive verbs in writing. 8.WA.5 - Use verbs in indicative, imperative, interrogative, conditional, and/or subjunctive mood in writing.	

Language: Conventions of Standard English	2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. A. Use punctuation (comma, ellipsis, dash) to indicate a pause or break. B. Use an ellipsis to indicate an omission. C. Spell correctly.	8.WA.6 - Use punctuation (e.g., comma, ellipsis, dash) to indicate a pause or break. 8.WA.7 - Spell words correctly in writing.	
Language: Knowledge of Language	3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. A. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty, or describing a state contrary to fact).	8.WA.8 - Use active and passive voice in writing to achieve particular effect. 8.WA.9 - Use verbs in the conditional and subjunctive mood to achieve a particular effect.	
Language: Vocabulary Acquisition and Use	4. Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. A. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in	8.RWL.g1 - Use context as a clue to the meaning of a grade-appropriate word or phrase. 8.RWL.j2 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word. 8.RWL.j3 - Consult	Use context as a clue to determine the meaning of a word (e.g., EDL grade 6 or 7).

	a sentence) as a clue to the meaning of a word or phrase. B. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede). C. Consult general and specialized 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 or trace the etymology of words. (CA) 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).	reference materials (e.g., dictionaries, glossaries, thesauruses) to find the synonym for a word. 8.RWL.j4 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses) to find the precise meaning of a word. 8.RWL.j1 - Verify the prediction of the meaning of a new word or phrase (e.g., by checking a dictionary).	
Language: Vocabulary Acquisition and Use	5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. A. Interpret figures of speech (e.g. verbal irony, puns) in context. B. Use the relationship between particular words to better understand each of	8.RWL.k1 - Identify irony within a text or media. 8.RWL.k2 - Identify a pun within a text or media. 8.RWL.k3 - Interpret figures of speech (e.g., allusions, verbal irony, puns) in context. 8.WL.n1 - Use literary devices (e.g., similes,	

	the words. C. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).	metaphors, hyperbole, personification, imagery) in narrative writing. 8.RWL.g2 - Use the relationship between particular words to better understand each of the words. 8.RWL.f1 - Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).	
Language: Vocabulary Acquisition and Use	6. Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	8.WA.10 - Use grade-appropriate general academic and domain-specific words and phrases accurately within writing. 8.RWL.i1 - Use general academic and domain specific words and phrases accurately.	Identify general academic words (e.g., EDL 6 or 7).