

Language Arts	
Reading	Kindergarten Learning Goals
Content Strand	
Basic Reading Skills	With prompting and support, ask and answer questions about key details in a text.
	With prompting and support, retell familiar stories, including key details.
	With prompting and support, identify characters, settings, and major events in a story.
	Identify the front cover, back cover, and title page of a book.
	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text and illustration depicts).
	Demonstrate understanding of the organization and basic features of print, <ol style="list-style-type: none"> follow words from left to right, top to bottom, and page by page, recognize that spoken words are represented in written language by specific sequences of letters, understand words are separated by spaces in print. recognize and name all upper and lowercase letters of the alphabet
Phonemic Awareness (sound patterns)	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). <ol style="list-style-type: none"> recognize and produce rhyming words, count, pronounce, blend, and segment syllables in spoken words, blend and segment onsets and rhymes of single-syllable spoken words, isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or cvc) words. (This does not include cvc's ending with /l/, /r/, or /x/.) add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.
	Know and apply grade-level phonics and word analysis skills in decoding words. <ol style="list-style-type: none"> demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary sound or many of the most frequent sounds for each consonant, associate the long and short sounds with common spellings (graphemes) for the five major vowels, read common high-frequency words by sight (e.g., <i>the, of, to, you, she, my, is, are, do, does</i>), distinguish between similarly spelled words by identifying the sounds of the letters that differ.
Writing	
Writing Process	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...).
	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.
Language	
Conventions of Grammar & Usage	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ol style="list-style-type: none"> print many upper and lower-case letters. use frequently occurring nouns and verbs form regular plural nouns, orally by adding /s/ or /es/ (e.g., <i>dog, dogs; wish, wishes</i>), understand and use question words (interrogatives) (e.g., <i>who, what, where, when, why, how</i>), use the most frequently occurring prepositions (e.g., <i>(to, from, in, out, on, off, for, of, by, with)</i>), produce and expand complete sentences in shared language activities.
Conventions of: Capitalization Punctuation Spelling	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> capitalize the first word in a sentence and the pronoun <i>I</i>. recognize and name end punctuation, write a letter or letters for most consonant and short-vowel sounds (phonemes), spell simple words phonetically, drawing on knowledge of sound-letter relationships.

Vocabulary	
	<p>With guidance and support from adults, explore word relationships and nuances in word meanings.</p> <p>a. sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.</p> <p>b. demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms),</p> <p>c. identify real-life connections between words and their use (e.g., note places at school that are colorful),</p> <p>d. distinguish shades of meaning among verbs describing the same general action (e.g., <i>walk, march, strut, prance</i>) by acting out the meanings.</p>
Math	Learning Goals
Critical Areas of Focus	<p>1. <i>Students use numbers to represent quantities and solve quantitative problems.</i></p> <p>2. <i>Students describe their physical world using geometric ideas (two and three-dimensional shapes).</i></p>
Content Strands	
Counting and Cardinality	<p>Know number names and the count sequence.</p> <p>Count to 100 by ones, twos, fives, and tens.</p> <p>Count forward from a given number (other than one).</p> <p>Identify, understand, and write numbers 0-30.</p> <p>Compare numbers.</p> <p>Identify, understand, and write numbers 0-30.</p>
Number and Operations in Base Ten	<p>Find sums or differences by adding or subtracting one digit numbers.</p> <p>Understand that numbers 11-19 are composed of tens and ones.</p>
Operations and Algebraic Thinking	<p>Decompose numbers less than or equal to 10 into pairs more than one way (drawings, objects, and equations).</p> <p>For any number 1 to 9, find the number that when added, will make 10.</p>
Measurement and Data	<p>Describe and compare measurable attributes of objects, such as length and weight.</p> <p>Directly compare two objects with a measurable attribute in common (compare, order, and describe).</p> <p>Classify objects and count the number of objects in categories.</p>
Geometry	<p>Identify and describe shapes and describe their position (above, below, beside, in front of, behind).</p> <p>Tell time to the whole hour.</p> <p>Identify shapes as two-dimensional or three-dimensional.</p> <p>Describe similarities, differences, and parts of shapes.</p> <p>Analyze, compare, and create two- and three-dimensional shapes.</p> <p>Recognize coins and the dollar bill.</p>
Science	Learning Goals
Content Strands	<i>Students are taught through thematic units</i>
Life Science	<p>Identify the five senses and demonstrate how they are used</p> <p>Describe ways we can keep our body safe</p> <p>Learn about the food groups and discuss foods that keep us healthy</p> <p>Demonstrate an appreciation and respect for all of God's creation</p>

	Observe plant growth and it's need for soil, water and light
	Use observations to describe patterns of what plants and animals need to survive
	Discuss animal habitats through Liturature/Author studies
Earth Science	Observe and record the daily temperature
	Identify weather conditions: sunny, rainy, cloudy, snowy, cold and warm
Physical Science	Make observations regarding physical properties of objects (i.e.size, shape, color, mass)
	Investigate the effects of "push and pull" on objects
Social Studies	Learning Goals
Content Strands	<i>Students will be taught through thematic units</i>
Knowledge of Self / Relationships	Discuss and provide examples of people relationships (parent-parent, parent-child, child -child)
	Describe/model ways to be a respectful person, friend
	Observe and describe how individuals are alike and different
	Provide examples of how we can play coopertively together (role play)
Knowledge of Governance	Discuss the need for rules in a family / school
	Obeys school and classroom rules
	Respects the property of self and others
	Recite the Pledge of Alligiance
Knowledge of Economics	Explain the difference between spend and save, needs and wants

Language Arts	
Content Strand	First Grade Learning Goals
Reading	
Basic Reading Skills	<p>Demonstrate understanding of the organization and basic features of print.</p> <p>a. recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation),</p>
	<p>Demonstrate understanding of spoken words, syllables, and sounds (phonemes).</p> <p>a. distinguish long from short vowel sounds in spoken single-syllable words,</p> <p>b. orally produce single-syllable words by blending sounds (phonemes),</p> <p>c. isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words,</p> <p>d. segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).</p>
Phonemic Awareness	<p>Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. know the spelling-sound correspondences for common consonant digraphs,</p> <p>b. decode regularly spelled one-syllable words,</p> <p>c. know final -e and common vowel team conventions for representing long vowel sounds,</p> <p>d. use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word,</p> <p>e. decode two-syllable words following basic patterns by breaking the words into syllables</p> <p>f. read words with inflectional endings,</p> <p>g. recognize and read grade-appropriate irregularly spelled words.</p>
Comprehension / Fluency	<p>Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. read grade-level text with purpose and understanding,</p> <p>b. read grade-level text orally with accuracy, appropriate rate, and expression on successive readings,</p> <p>c. use context to confirm or self-correct word recognition and understanding, rereading as necessary</p>
	Ask and answer questions about key details in a text.
	Identify the main topic and retell key details of a text.
	Retell stories, including key details, and demonstrate understanding of their central message or lesson.
	Describe characters, settings, and major events in a story, using key details.
	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
	Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
	Identify who is telling the story.
	Use illustrations and details in a story to describe its characters.
	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
	Use the illustrations and details in a text to describe its key ideas.
	Identify the reasons an author gives to support points in a text.
	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
Writing	
Writing Process	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.
Language	
Conventions of: Grammar Usage Handwriting: manuscript	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. print all upper and lowercase letters, b. use common, proper, and possessive nouns, c. use singular and plural nouns d. use personal, possessive, and indefinite pronouns (e.g., <i>I, me, my; they, them, their; anyone, everything</i>). e. use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>). f. use frequently occurring adjectives, g. use frequently occurring conjunctions (e.g., <i>and, but, or, so, because</i>), h. use frequently occurring prepositions (e.g., <i>during, beyond, toward</i>), i. produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
Conventions of: Capitalization Punctuation Spelling	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. capitalize dates and names of people, b. use end punctuation for sentences, c. use commas in dates and to separate single words in a series, d. use conventional spelling for words with common spelling patterns and for frequently occurring irregular words, e. spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
	Use sentence-level context as a clue to the meaning of a word or phrase.
	With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meaning. a. sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. b. define words by category and by one or more key attributes (e.g., a <i>duck</i> is a bird that swims; a <i>tiger</i> is a large cat with stripes), c. identify real-life connections between words and their use (e.g., note places at home that are <i>cozy</i>), d. distinguish shades of meaning among verbs differing in manner (e.g., <i>look, peek, glance, stare, glare, scowl</i>) and adjectives differing in intensity (e.g., <i>large, gigantic</i>) by defining or choosing them or by acting out the meanings
Math	Learning Goals
Critical Areas of Focus	1. <i>Students develop strategies for adding and subtracting whole numbers.</i> 2. <i>Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10</i> 3. <i>Students develop an understanding of the meaning and processes of measurement.</i> 4. <i>Students compose and decompose plane or solid figures</i>
Content Strands	
Operations and Algebraic Thinking	Add and subtract within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions by using objects, drawings, and equations. Solve word problems by adding three numbers whose sum is less than or equal to 20, by using objects, drawings, and equations. Understand and apply properties of operations (associative and commutative) as strategies for adding and subtracting. Use fact families to find sums and differences. Understand the meaning of the equal sign, and determine if addition and subtraction equations are true or false. Determine the unknown whole number in an addition or subtraction problem (e.g., $5 + ? = 7$, $6 = ? - 4$, $5 + 5 = ?$).

Social Studies	
Content Strands	Learning Goals
Knowledge of Principles and Processes of Governance Systems	Identify reasons for rules within the school, community and city
	Discuss how individual rights are protected
	Give examples of being an good citizen in your classroom and/or community
	Recognize the significance of symbols of of your community
Knowledge of Continuity and Change	Describe the roles of people responsible for keeping order in a school, community, country
	Describe the contributions of people associated with national holidays
Knowledge of Economic Concepts and Principles	Describe life long ago
	Describe examples of scarcity within your school and community
	Describe consumers and producers and the relationship to goods and services withing your school community
Knowledge of Geographical Study	Describe kinds of jobs in the community, state, country
	Identify globes as representations of real places
	With assistance, read, construct, and use maps which have a title and key
Knowledge of Relationships of the Individual and Groups	Describe how maps are created for different purposes such as a school fire drill, a trip to the zoo, etc
	Propose peaceful resolutions of disputes in the classroom and on the playground
	Demonstrate respect for self and others

Language Arts	
Content Strand	
Reading	Second Grade Learning Goals
Basic Reading Skills	Ask and answer such questions as <i>who, what, where, when, why, and how</i> to demonstrate understanding of key details in a text.
	Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
	Describe how characters in a story respond to major events and challenges.
	Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
	Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the story and the ending concludes the action.
	Acknowledge differences in the points of view of characters, including speaking in a different voice for each character when reading dialogue aloud.
	Uses information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
	Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.
	Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
	Describe the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
	Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
	Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
	Describe how reasons support specific points the author makes in a text.
Compare and contrast the most important points presented by two texts on the same topic.	
Phonemic Awareness / Decoding	<p>Know and apply grade-level phonics and word analysis skills in decoding words.</p> <ul style="list-style-type: none"> a. distinguish long and short vowels when reading regularly spelled one-syllable words, b. know spelling-sound correspondences for additional common vowel teams, c. decode regularly spelled two-syllable words with long vowels, d. decode words with common prefixes and suffixes, e. identify words with inconsistent but common spelling-sound correspondences, f. recognize and read grade-appropriate irregularly spelled words.
Comprehension / Fluency	<p>Read with sufficient accuracy and fluency to support comprehension.</p> <ul style="list-style-type: none"> a. read grade-level text with purpose and understanding, b. read grade-level text orally with accuracy, appropriate rate, and expression, c. use content to confirm or self-correct word recognition and understanding, rereading as necessary.
Writing	
Writing Process	Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., <i>because, and also</i>) to connect opinion and reasons, and provide a concluding statement or section.

	Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
	Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.
Language	
Conventions of: Grammar Usage	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. use collective nouns (e.g., <i>group</i>), b. form and use frequently occurring irregular plural nouns (e.g., <i>feet, children, teeth, mice, fish</i>) c. use reflexive pronouns (e.g., <i>myself, ourselves</i>), d. form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat, hid, told</i>), e. use adjectives and adverbs, and choose between them depending on what is to be modified, f. produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy.</i>)
Conventions of: Capitalization Punctuation	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. capitalize holidays, product names, and geographic names b. use commas in greetings and closings of letters, c. use an apostrophe to form contractions and frequently occurring possessives, d. generalize learned spelling patterns when writing words (e.g., <i>cage - badge; boy - boil</i>), e. consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
Consult Reference Materials	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing from an array of strategies. a. use sentence-level context as a clue to the meaning of a word or phrase, b. determine the meaning of the new word formed when a known prefix is added to a known word (e.g., <i>happy/unhappy, tell/retell</i>), c. use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark</i>), d. use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
	Demonstrate understanding of word relationships and nuances in word meanings. a. identify real-life connections between words and their use (e.g., describe foods that are <i>juicy or spicy</i>), b. distinguish shades of meaning among closely related verbs (e.g., <i>toss, throw, hurl</i>), and closely related adjectives (e.g., <i>thin, slender, skinny, scrawny</i>).
Math	Learning Goals
Critical Areas of Focus	1. <i>Extend understanding of the base-ten system.</i> 2. <i>Build fluency with addition and subtraction.</i> 3. <i>Use standard units of measure.</i> 4. <i>Describe and analyze shapes.</i>
Content Strands	

Number and Operations	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.
	Count within 1000; skip count by 5s, 10s, and 100s.
	Read and write numbers to 1000 using base-ten notation, number names, and expanded form.
	Compare three digit numbers using $<$, $=$, and $>$.
	Use place value understanding and properties of operations to add and subtract. a. Fluently add and subtract within 100. b. Add up to four two-digit numbers. c. Add and subtract within 100, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. d. Mentally add or subtract 10 and 100 to a given number 100-900. e. Add and subtract two- and three-digit numbers with regrouping.
Operations and Algebraic Thinking	Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number.
	Fluently add and subtract within 20 using mental strategies.
	Work with equal groups of objects to gain foundations for multiplication. a. Determine whether a group of objects has an odd or even number of members. Write the total as a sum of two equal addends. b. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. Write the total as of equal addends.
Measurement and Data	Relate addition and subtraction to length. a. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. b. Represent whole-number sums and differences on a number line.
	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies.
	Measure and estimate lengths in standard units. a. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. b. Estimate lengths using units of inches, feet, centimeters, and meters.
	Tell and write time from analog and digital clocks from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
	Represent and interpret data. a. Generate measurement data by measuring lengths of several objects to the nearest whole unit. Show the measurements by making a line- b. Draw a picture graph and a bar graph to represent a data set with up to four categories.
	Read a thermometer in degrees Fahrenheit and degrees Celsius.
Geometry	Reason with shapes and their attributes. a. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. b. Divide circles and rectangles into halves, thirds, and fourths. Describe the whole as two halves, three thirds, or four fourths. c. Divide a rectangle into rows and columns of same-size squares and count to find the total number of them.
Science	Learning Goals
Content Strands	
Life Science	Explain what plants need to grow

	Explain what plants need to grow
	Recognize and describe characteristics of insects, amphibians, reptiles, birds and mammals
	Compare plants and animals in their natural habitat
Earth Science	Recognize that conditions in the air that create weather
	Describe the Earth's surface
	Explain what maps tell us about the Earth
	Explain why we have seasons in Missouri
	Describe how people and animals adjust to seasonal changes
Physical Science	
Properties of Matter	Explore types of solids, liquids and gases and ways to measure
	Make observations of the effects of temperature on matter
Social Studies	Learning Goals
Content Strands	
Belonging to a Community	Describe human characteristics of your community
	Compare and contrast the culture in a variety of communities (pilgrims, Native Americans, ...)
Knowledge of Continuity and Change	Describe contributions of inventors or pioneers in their field who influenced progress in our country
	Explain why communities make laws
	Describe the character traits of role models within your community
	Describe the contributions of people
Knowledge of Economic Concepts	Describe examples of goods and services within your school and community
	Describe needs and wants, producers and consumers
Knowledge of Presidents in the U.S.	Identify Presidents of the United States
Knowledge of Geographical Study	Read and construct maps with title and key
	Use a compass rose to identify cardinal directions on a map
	Identify physical characteristics of your community
	Identify the properties and use of different types of maps for a variety of purposes
	Describe different types of communication and transportation and identify their advantages and disadvantages
Knowledge of Relationships of the Individual and Groups	Demonstrate a peaceful resolution to a dispute
	Demonstrate respect for self and others

Language Arts	
Reading	Third Grade Learning Goals
Content Strand	
Reading Skills / Comprehension Phonemic Awareness	<p>Know and apply grade-level phonics and word analysis skills in decoding words.</p> <ul style="list-style-type: none"> a. identify and know the meaning of the most common prefixes and derivational suffixes. b. decode words with common Latin suffixes. c. decode multisyllable words
	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
	Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
	Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
	Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.
	Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
	Distinguish their own point of view from that of the narrator or those of the characters.
	Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).
	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
Writing	
Writing Process	<p>Write opinion pieces on topics or texts, supporting a point of view with reasons.</p> <ul style="list-style-type: none"> a. introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. provide reasons that support the opinion c. provide a concluding statement or section.
	<p>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> a. introduce a topic and group related information together; include illustrations when useful to aid comprehension b. develop the topic with facts definitions, and details c. use linking words and phrases (e.g. also, another, and, more, but) to connect ideas within categories of information. d. provide a concluding statement or section
	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences,</p> <ul style="list-style-type: none"> a. establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to s c. use temporal words and phrases to signal event order, d. provide a sense of closure.
Language	
Conventions of: Grammar, Punctuation, Capitalization, Spelling	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in a particular sentence. b. form and use regular and irregular plural nouns c. use abstract nouns (e.g., childhood) d. form and use irregular verbs, e. form and use the simple (e.g., I walked; I walk; I will walk) verb tenses, f. ensure subject-verb and pronoun-antecedent agreement, g. form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. use coordinating and subordinating conjunctions, i. produce simple compound, and complex sentences

	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> capitalize appropriate words in titles, use commas in addresses, use commas and quotation marks in dialogue, form and use possessives use conventional spelling for high-frequency and other studied words and for adding suffixes to base words and for adding suffixes to base words (e.g., <i>sitting, smiled, cries, happiness</i>). use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words, consult a dictionary as needed to check and correct spellings.
	<p>Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> use sentence-level context as a clue to the meaning of a word or phrase, determine the meaning of the new word formed when a known affix is added to a known word (e.g., <i>agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat</i>), use a known root word as a clue to the meaning of an unknown word with the same root (e.g., <i>company, companion</i>)
	<p>Demonstrate understanding of word relationships and nuances in word meanings</p> <ol style="list-style-type: none"> distinguish the literal and nonliteral meanings of words and phrases in context (e.g., <i>take steps</i>) identify real-life connections between words and their use (e.g., describe people who are <i>friendly or helpful</i>). distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew, believed, suspected, heard, wondered</i>).
	<p>Acquire and use accurately grade-appropriate conversational general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them.</i>)</p>
Math	Learning Goals
Critical Areas of Focus	<ol style="list-style-type: none"> Develop Understanding of multiplication and division and strategies for multiplication and division within 100.. Develop understanding of the structure of rectangular arrays and of area. Describe and analyze two-dimensional shapes.
Content Strand	
Operations and Algebraic Thinking	<p>Represent and solve problems involving multiplication and division.</p> <ol style="list-style-type: none"> Interpret products of whole numbers (e.g. 3 groups of 5 objects is 3×5). Interpret whole number quotients (35 objects divided into 7 groups is 5 objects each). Represent and solve equations with a letter standing for the unknown quantity.
	Apply commutative (order) and associative (grouping) properties to multiply and divide.
	Apply properties of zero ($4 + 0 = 4$, $5 \times 0 = 0$).
	Understand division as the inverse of multiplication (fact families).
	Solve two-step word problems using the four operations. Use a symbol to represent the unknown quantity. Assess the reasonableness of an
Number and Operations	Use place value understanding and properties of operations to multiply one-digit whole numbers by multiples of 10 (e.g. 3×40 , 8×60).
	Understand place value to hundred thousands.
	Round numbers to the nearest 10, 100, or 1000.
	Fluently add and subtract up to 1000.
	Fluently multiply and divide through 10.

	Multiply and divide up to one digit by three digits.
	Develop understanding of fractions as numbers. a. Understand a fraction as the quantity formed when a whole is divide into equal parts and identify part shaded. b. Understand a fraction as a number on a number line. c. Understand a fraction as part of a group. c. Understand two fractions as equivalent if they are the same size or the same point on a number line. d. Recognize and generate simple equivalent fractions: $1/2 = 2/4 = 3/6$. e. Express whole numbers as fractions, and fractions that are equivalent to whole numbers. f. Compare two fractions with the same numerator or the same denominator.
Measurement and Data	Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the product of the side lengths. b. Use tiling to model the distributive property (e.g. A 2 x 3 rectangle added to a 4 x 3 rectangle makes a 6 x 3 rectangle).
	Recognize and measure area by counting unit squares (square cm, square m, square in, and square ft).
	Solve real world problems involving perimeters of polygons.
	Measure lengths using rulers marked with halves and fourths of an inch.
	Tell and write time to the nearest minute and measure time intervals in minutes. Identify time as a fraction of an hour in minutes (e.g. 15 minutes is $1/4$ hour, 30 minutes is $1/2$ hours). Solve problems involving addition and subtraction of time intervals in minutes.
	Measure and estimate liquid volumes and masses of objects using standard units (grams, kilograms, and liters).
	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.
	Read a thermometer (F and C).
	Identify probability of single events.
Geometry	Understand that shapes in different categories (e.g. rhombuses, rectangles, etc.) may share attributes and that the shared attributes can defin
	Recognize and name a cylinder, a prism, and cube.
	Represent a cylinder, a prism, and a cube as a net.
	Identify a flip across a line of symmetry.
	Identify angles as acute, right, or obtuse and identify polygons by their angles.
Science	Learning Goals
Content Strand	
Life Science	Describe the life cycle of plants (from seeds to reproduction)
	Examine the life cycles of animals
	Explain how some organisms are more likey to survive in their environment (include adaptations and behaviors)
	Explain the needs of animals and how they respond to their environment
	Explore ways to classify animals
	Identify stages in an animal's life
	Identify the make up of an ecosystem
	Identify habitats in an ecosystem

	Discuss changes that occur within an ecosystem
Earth Science	
	Describe steps in the water cycle and the importance of water conservation
	Classify resources as renewable and nonrenewable
	Identify Earth's surface features and causes of change
	Describe Earth's atmosphere
	Identify changes in weather
	Discuss causes for climate change
Physical Science	
	Explore force and causes for change in motion
	Explore electrical energy and how it is formed and transferred
	Examine simple machines
	Observe magnetic forces
Social Studies	Learning Goals
Content Strand	
Knowledge of Communities	Identify characteristics of different communities and other neighboring communities
Knowledge of Documents Shaping the Democracy	Explain and give examples of how laws and rules are made and changed within the community
	Examine how individual rights are protected within a community
	Analyze how being an active and informed citizen makes a difference in your community
	Describe the importance of the Pledge of Allegiance
Knowledge of Continuity and Change	Identify community changes in the past 50 years
	Compare the culture and people in our community across multiple time periods
Knowledge of the Symbols	Recognize significance of symbols including national landmarks, parks and important memorials
Knowledge of Geographical Study	Read and construct maps with title and key
	Name and locate major communities, rivers in Missouri
	Apply the concepts of distance, direction and location
	Recognize the 50 states in the United States
Knowledge of Economic Concepts	Define economy
	Demonstrate how people use money to buy and sell goods and services
	Explain supply and demand
	Define taxes and how taxes are generated and used
	Describe how changes in communication and transportation technologies affect people's lives
Knowledge of Relationships of the Individual and Groups	Take part in a constructive process or method for resolving conflicts

Language Arts	
Reading	Fourth Grade Learning Goals
Content Strand	
Reading Skills / Comprehension	<p>Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>Determine a theme of a story, drama, or poem from details in the text; summarize the text.</p> <p>Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).</p> <p>Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology. (e.c., Herculean).</p> <p>Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter, and drama (e.g., cast of characters, settings, descriptions, dialogue) when speaking about a text.</p> <p>Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.</p> <p>Make connections between the text of the story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.</p> <p>Compare and contrast the treatment of similar themes and topics (e.g., the quest) in stories, myths, and traditional literature from different cultures.</p> <p>Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p>a. use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.</p>
Fluency	<p>Read with sufficient accuracy and fluency to support comprehension.</p> <p>a. read grade-level text with purpose and understanding.</p> <p>b. read grade-level prose and poetry orally with accuracy, appropriate rate, and expression</p> <p>c. use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>
Writing	
Writing Process	<p>Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <p>a. introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose</p> <p>b. provide reasons that are supported by facts and details</p> <p>c. link opinion and reasons using words and phrases (e.g., <i>for instance, in order to, in addition</i>)</p> <p>c. provide a concluding statement or section related to the opinion presented.</p>
	<p>Write informative / explanatory texts to examine a topic and convey ideas and information clearly.</p> <p>a. introduce a topic clearly and group related information in paragraphs and sections; including formatting (e.g. headings), illustrations, etc when useful to aid in comprehension</p> <p>b. develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic</p> <p>c. link ideas within categories of information using words and phrases (e.g., <i>another, for example, also, because</i>).</p> <p>d. use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>e. provide a concluding statement or section related to the information or explanation presented.</p>

	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally use dialog and description to develop experiences and events or show the responses of characters to situations use a variety of transitional words and phrases to manage the sequence of events use concrete words and phrases and sensory details to convey experiences and events precisely provide a conclusion that follows from the narrated experiences or events
	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
	Conduct short research projects that build knowledge through investigation of different aspects of a topic.
	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information and provide a list of sources.
Language	
Conventions of Grammar	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). form and use the progressive (e.g., I was walking) verb tenses. use modal auxiliaries (e.g., may, can, must) to convey various conditions. form and use prepositional phrases. produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).
Conventions of: Capitalization, Punctuation	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ol style="list-style-type: none"> use correct capitalization use commas and quotation marks to mark direct speech and quotations from a text. use a comma before a coordinating conjunction in a compound sentence.
	<p>Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <ol style="list-style-type: none"> choose words and phrases to convey ideas precisely. choose punctuation for effect.
	<p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content.</p> <ol style="list-style-type: none"> use context (e.g., definitions, examples or restatements in a text) use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>telegraph, photograph, autograph</i>).
	<p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> explain the meaning of simple similes and metaphors (e.g., <i>as pretty as a picture</i>) in context. recognize and explain the meaning of common idioms, adages, and proverbs. demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).
Math	Learning Goals
Content Strands	

Critical Areas of Focus	<p>1. <i>Develop an understanding and fluency with multi-digit multiplication, and develop an understanding of dividing to find quotients involving multi-digit dividends.</i></p> <p>2. <i>Develop an understanding of fraction equivalence; addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers.</i></p> <p>3. <i>Understand that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.</i></p>
Content Strand	
Operations and Algebraic Thinkin	Interpret multiplication as a comparison, e.g. interpret $42 = 6 \times 7$ as 42 is 6 times as many as 7 and 7 times as many as 6.
	Multiply or divide to solve word problems involving multiplicative comparison, using drawings and equations with variables to represent unknown quantities.
	Solve multistep word problems using four operations and interpret remainders when dividing. Represent problems with equations using a variable to represent unknown quantities.
	Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
	Find all factor pairs of numbers from 1-100.
	Find multiples of whole numbers in the range 1-100.
	Determine whether a number is prime or composite.
	Apply properties of zero ($4 + 0 = 4$, $5 \times 0 = 0$).
Number and Operations	<p>Recognize place value for multi-digit whole numbers</p> <p>a. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right</p> <p>b. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.</p> <p>c. Compare multi-digit whole numbers.</p> <p>d. Use place value understanding to round multi-digit whole numbers to any place.</p> <p>e. Create the smallest number and largest number possible given the digits.</p>
	Multiply a whole number of up to four digits by a one-digit whole number, and multiply 2 two-digit numbers. Illustrate and explain the calculation by using equations, rectangular arrays, and area models.
	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors. Illustrate and explain the calculation by using equations, rectangular arrays, and area models.
	<p>Extend understanding of fraction equivalence and ordering.</p> <p>a. Explain why a two fractions are equivalent by using visual fraction models, e.g. $1/2 = 2/4$.</p> <p>b. Compare two fractions with different numerators and different denominators , e.g. by creating common denominators or numerators, or by comparing to benchmarks such as 0, $1/2$, or 1.</p> <p>Justify conclusions using a visual fraction model.</p>
	<p>Build fractions from unit fractions.</p> <p>a. Understand a fraction such as $3/5 = 1/5 + 1/5 + 1/5$.</p> <p>b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, e.g. $3/5 = 2/5 + 1/5$ or $3/5 = 1/5 + 1/5 + 1/5$.</p> <p>c. Understand addition and subtraction of fractionsa s joining and separating parts referring to the same whole.</p> <p>d. Add and subtract mixed numbers with like denominators.</p> <p>e. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.</p>

	<p>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, e.g. use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times \frac{1}{4}$.</p> <p>b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times \frac{2}{5}$ as $6 \times \frac{1}{5}$, recognizing this product as $\frac{6}{5}$.</p>
Measurement and Data	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>a. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money; including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.</p> <p>b. Understand and read temperatures in degrees Celsius and degrees Fahrenheit.</p> <p>c. Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p> <p>d. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz; L, mL; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit.</p> <p>c. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.</p>
	<p>Represent and interpret data.</p> <p>a. Make a line plot to display a data set of measurements.</p> <p>b. Read and interpret a box-and-whisker plot.</p>
	<p>Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.</p> <p>a. An angle is measured with reference to a circle with its center at the common endpoint of the rays. An angle that turns through $\frac{1}{360}$ of the circle is called a "one-degree angle."</p> <p>b. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>c. Classify angles as obtuse, acute, or right and compare their measurements to 90 degrees.</p> <p>d. Recognize that angle measure is additive. The angle measure of the whole is equal to the sum of the angle measures of the parts.</p>
Geometry	<p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p> <p>a. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>b. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size.</p> <p>Recognize right triangles as a category, and identify right triangles. Understand the attributes of a polygon.</p> <p>c. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts.</p> <p>d. Identify line-symmetric figures and draw lines of symmetry. Identify a reflection or "flip."</p>
	Classify shapes as similar and non-similar.
	Recognize and find area by counting square units.
	Recognize and find volume by counting centimeter cubes when given a three-dimensional figure.
	Recognize and fold nets into three-dimensional figures (cubes and rectangular prisms).
Science	Learning Goals
Content Strands	
Life Science	Explain how plant structures help them survive and reproduce
	Explain how animal structures help them survive

	Describe how animals sense and respond to information
	Recognize how animals see and how shapes and sizes of animals' eyes are related to their functions
Earth Science	Describe the Earth's landforms and features
	Explain how living and nonliving things change the Earth's surface
	Discuss what different rock formations tell us about Earth's history
	Explore how people are affected by earthquakes and volcanoes
	Describe the effects of floods and what people can do to prepare for them
	Examine the Earth's nonrenewable resources
	Describe how renewable resources are used as energy
Physical Science	Explore how energy is transferred from one object to another (electric current, light)
	Describe how waves travel (amplitude and wavelength)
	Recognize how we use patterns and waves to transmit information
Social Studies	Learning Goals
Content Strands	
Documents Shaping Constitutional Democracy in the United States	With assistance, read and analyze the text of Declaration of Independence to determine important principles that it contains including inalienable rights
	Explain the major purposes of the United States Constitution
	Explain the major purposes of the Bill of Rights
Principles and Process of Government	Explain how authoritative decisions are made
	Examine the territorial expansion of the United States
	Explain the functions of the three branches of government
Continuity and Change in the History of Missouri and the United States	Describe the migrations of native Americans prior to 1800
	Describe the discovery, exploration and early settlement of America by Europeans prior to 1800
	Identify major historical event in Missouri
	Explain the major purposes of the Missouri Constitution
	Explain how laws are made and changed within the state
	Locate the major cities and rivers in Missouri
	Recognize and explain the significance of the Gateway Arch and the Great Seal of Missouri
	Describe the Importance of the Louisiana Purchase and the expedition of the Lewis and Clark
	Identify and describe the historical significance of the individuals from Missouri who have made contributions to our state and nation
	Explain the effects of slavery and the role of the Underground Railroad

	Evaluate the impact of westward expansion on the Native Americans in Missouri
	Examine Missouri's role in the Civil War
Economic Concepts and Principle	Explain the relationship between profit and loss in economic decisions.
	Explain how the government utilizes taxes to provide goods and services
Knowledge of Elements of Geographical Study	Identify and locate the 50 states on the map of the United States
	Construct maps
	Learn the states and capitals
	Apply the concepts of latitude and longitude, map scale and elevation
Knowledge of Relationships of the Individual and Groups	Apply constructive processes or methods for resolving conflicts

Language Arts	
Reading	Fifth Grade Learning Goals
Content Strand	
Comprehension / Literary Analysis Skills	Determine 2 or more main ideas of a text, explain supporting details
	Explain relationships or interactions between 2 or more individuals, events, ideas, or concepts
	Compare and contrast the overall structure (cause/effect, problem/solution)of events, ideas, concepts
	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent
	Draw on information from multiple print or digital sources demonstrating the ability to locate an answer to a question quickly or to solve a problem
	Explain how an author uses reasons and evidence to support particular points of text, identifying reasons and evidence to support point(s)
	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
	By the end of the year, read and comprehend informational texts independently and proficiently
	Apply skills to various types of literature including : folktales, legends, fables, fantasy, realistic fiction, myth, biographies, autobiographies and poetry
Writing	
Writing Process	Write opinion pieces on topics, supporting a point of view with reasons and information. a. introduce a topic b. create an organizational structure in which ideas are logically grouped c. provide reasons that are supported by facts and details d. link opinions and reasons using words, phrases and clauses (e.g., consequently, specifically) e. provide a concluding statement
	Write informative / explanatory tests to exam a topicand convey ideas. a. introduce a topic clearly b. develop the topic with facts, concrete details, examples c. link ideas within and across catagories using words, phrases, clauses (e.g., in contrast, especially) d. provide a concluding statement
	Write narratives to develop real or imagined experiences using descriptive details and clear event sequence. a. establish a situation and introduce a narrator and/or characters; organize a event sequence that unfolds naturally. b. use a variety of transitional words, phrases, and clauses to manage the sequence of events c. use concrete words and phrases and sensory details d provide a conclusion that follows the narrated experiences or events.
	With guidance, strengthen writing as needed by planning, revising, editing, rewriting
Language	
Conventions of: grammar, punctuation, capitalization, spelling	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking a. explain the function of nouns, verbs, adjectivess, pronouns, conjunctions, prepositions, interjections in general and in particular sentences b. form and use the perfect verb tense (e.g., I had walked) c. use verb tense to convey various times, sequences, states, and conditions d. recognize and correct inappropriate shifts in verb tense e. use correlative conjunctions (e.g.,either/or, neither/nor).

	<p>Understand the place value system.</p> <p>a. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it does in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>b. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when multiplying and dividing whole numbers.</p> <p>c. Read, write, and compare decimals to thousandths using base-ten numerals, number names, and expanded form.</p> <p>d. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.</p> <p>e. Use place value understanding to round decimals to any place.</p>
	<p>Perform operations with multi-digit whole numbers and with decimals to hundredths.</p> <p>a. Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <p>b. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors. Illustrate and explain the calculation by using the standard algorithm, showing understanding of the relationship between multiplication and division, and using the relationship $a \times b = \frac{a}{\frac{1}{b}}$.</p> <p>c. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings.</p>
	Understand and find Greatest Common Factor and Least Common Multiple.
Measurement and Data	Make a line plot to display a data set of measurements
	Interpret a box-and-whisker plot.
	Interpret a scatter plot using a trend line.
	Find area of an irregular shape by counting square units.
	Find perimeter.
	<p>Understand concepts of volume and relate volume to multiplication and addition</p> <p>a. Recognize volume as an attribute of solid figures and understand concepts of volume measurement, e.g. a cube with side length 1 unit, call it a unit cube. Measure the volume of right rectangular prisms by counting unit cubes, using cubic cm, cubic in, cubic ft, etc.</p> <p>b. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, etc.</p> <p>c. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <p>i. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the sum of volumes of non-overlapping parts.</p> <p>ii. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms in the context of solving real-world and mathematical problems.</p> <p>iii. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the individual prisms.</p>
	Choose appropriate units for measurements.
	Measure and convert customary and metric units of measurement.
	Measure to the nearest millimeter and the nearest 1/8 inch.
	Find the mean of a set of data.
Geometry	<p>Classify two-dimensional figures into categories based on their properties.</p> <p>a. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category, e.g. all rectangles have four right angles. Explain how the categories are related.</p> <p>b. Classify two-dimensional figures in a hierarchy based on properties, e.g. according to size of angles and number of sides.</p> <p>c. Identify solid figures, including prisms, cylinders, and pyramids. Recognize the nets of these figures.</p> <p>d. Identify similar polygons.</p> <p>e. Graph points on the coordinate plane to solve real-world and mathematical problems.</p>
	Identify line of symmetry and rotational symmetry; recognize flip, turn, and slide.
Science	Learning Goals
Content Strands	
Life Science	Describe the needs of living organisms
	Explain the various types of habitats
	Describe plant parts, discuss how plants respond to their environment
	Explain what plants and animals need to survive
	Describe how plants use cellular respiration to carry out life processes

	Identify the make up of an ecosystem and the flow of energy
	Describe how changes affect ecosystems
	Investigate how matter is cycled through ecosystems
Earth Science	Identify and describe Earth's major systems
	Explain how the geosphere / hydrosphere / atmosphere / biosphere affect other systems
	Describe how the Sun, Earth, and Moon interact
	Explore the causes of repeating patterns of the Moon's appearance
	Investigate other objects that can be found in space
	Explore the relative brightness of the Sun and other stars
Physical Science	
	Describe how the particles in matter are organized
	Explain how the particles in matter affect the properties
	Describe properties of metals and nonmetals
	Describe the impact on matter when it changes its state
	Explain how matter changes when it interacts with other matter
	Describe the characteristics of static electricity and explore its effects
	Compare dry cells and wet cells
	Identify parts that are needed to make a circuit, contrast a series circuit and a parallel circuit
	Describe the properties of magnets and magnetic fields
	Explore motion and ways to measure motion
Social Studies	
Content Strand	<i>Ancient Civilization and World History</i>
History: Continuity and Change	Explain the connections between historical context and peoples' perspectives at the time in world history
	Analyze a chronological sequence of related events in world history
	Identify the essential elements of cultural development and diffusion (Ancient Mediterranean Civilizations, The Americas)
	Analyze the following developments related to the Renaissance and Reformation including: new ways of thinking, humanism, new developments in arts and their impact on later developments
	Identify and explain the major revolutions of the 18th & 19th centuries, including: political revolutions and the Industrial Revolution
	Describe the evolution of economic theories and practices including: capitalism and socialism. Describe the social and political effects these have had on various societies.
	Evaluate European imperialism of the late 19 & 20th centuries and the independence movements in Africa and Asia
	Outline major demographic changes and migrations: their causes and consequences (rural to urban, less developed to more developed)
Governmental Systems and Principles	Determine how governmental systems affect individuals and groups in society
	Distinguish the powers and responsibilities of subjects and political leaders
Geographic Study	Identify and apply 6 elements of geography
	Apply global geography skills (mapping, evaluating, creating)

	Describe the impact of human settlement activities on the environmental and cultural characteristics of world regions
	Locate major cities of the world and key world nations; continents and oceans, major topographical features of the world
	Evaluate how geography influences the way people live, trade and organize governments
	Examine the adaptation of people to their environment
Knowledge of the use of tools of social inquiry	Distinguish between primary and secondary sources
	Distinguish between fact and opinion and analyze sources to recognize bias and points of view
	Interpret charts, statistics, charts, diagrams, graphs, timelines, pictures, political cartoons, written resources and artifacts
People, Groups and Cultures	Explain the connections between historical context and peoples' perspectives at the time in world history
	Identify the factors that determine the rise and fall of civilizations
	Analyze the structure of society and it's role in the creation and destruction of civilizations from ancient to modern era
	Apply the 5 factors of civilization (River Valley Civilizations)
Economic Concepts	Explain how political and economic stability affects the well-being of individuals and society

Language Arts	
Reading	Sixth Grade Learning Goals
Content Strand	
Comprehension Skills / Literary Analysis	<p>Cite textual evidence to support analysis of what the text says as well as inferences drawn from text</p> <p>Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text</p> <p>Describe how a story's or drama's plot unfolds in a series of episodes as well as how characters respond or change as the plot moves toward</p> <p>Determine the meaning of words and phrases as they are use in a text, including figurative and connotative meanings; analyze the impact of a specific word on meaning and tone.</p> <p>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.</p> <p>Explain how an author develops the point of view of the narrator or speaker in a text.</p> <p>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.</p> <p>Compare and contrast texts in different forms or genres in terms of their approaches to similar themes and topics</p> <p>For Informational Text:</p> <p>Cite textual evidence to support analysis of what the text says as well as inferences drawn from text.</p> <p>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 judgements.</p> <p>Analyze in detail how a key individual, event or idea is introduced, illustrated and elaborated in a text.</p> <p>Determine and author's point of view or purpose in a text and explain how it is conveyed in the text.</p> <p>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.</p> <p>Compare and contrast one author's presentation of events with that of another (e.g., memoir written by and a biography on the same person)</p>
Writing	
Writing Process	<p>Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> introduce claim(s) and organize the reasons and evidence support claim with clear reason and relevant evidence, using credible sources use words, phrases, and clauses to clarify the relationships among claims and reasons provide a concluding statement or section that follows from the argument presented
	<p>Write informative / explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relevant content.</p> <ol style="list-style-type: none"> introduce a topic develop the topic with relevant facts, details or other information use appropriate transitions to clarify the relationships among ideas and concepts. provide a concluding statement

	<p>Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details and well-structured event sequences.</p> <p>a. engage the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally</p> <p>b. use narrative techniques, such as dialogue, pacing and description, to develop experiences, events and/or characters</p> <p>c. use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another</p> <p>d. use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events</p> <p>e. provide a conclusion that follows from the narrated experiences or events</p>
	With guidance and support, develop and strengthen writing as needed by planning, revising, editing and rewriting
Language	
Conventions of: grammar, spelling, capitalization	<p>Demonstrate command of the conventions of standard English grammar and usage when writing and speaking.</p> <p>a. ensure that pronouns are in the proper case (subjective, objective, possessive)</p> <p>b. use intensive pronouns (e.g., <i>myself</i>, <i>ourselves</i>)</p> <p>c. recognize and correct inappropriate shifts in pronoun number and person</p> <p>d. recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents)</p>
	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements</p> <p>b. spell correctly</p>
	<p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content.</p> <p>a. use context</p> <p>b. use common, grade appropriate Greek or Latin affixes and roots as clues to the meaning of the word</p> <p>c. consult reference materials</p>
	<p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>a. interpret figures of speech (e.g., personification) in context</p> <p>b. use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the word</p>
Math	Learning Goals
Critical Areas of Focus	<ol style="list-style-type: none"> 1. Connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems. 2. Connecting understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers. 3. Writing, interpreting and using expressions, and equations. 4. Developing understanding of statistical thinking. 5. Develop understanding of negative numbers.
Content Strands	
Ratios and Proportional Relationships	<ol style="list-style-type: none"> 1. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. 2. Understand the concept of a unit rate a/b associated with a ratio $a:b$, and use rate language in the context of a ratio relationship, <i>i.e.</i> This relationship is equivalent to the unit rate a/b. 3. Use ratio and rate reasoning to solve real-world and mathematical problems by reasoning about tables of equivalent ratios, double number lines, tape diagrams, and equations. <ol style="list-style-type: none"> a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs on a coordinate plane. b. Solve unit rate problems including those involving unit pricing and constant speed. <i>i.e.</i> If it took 7 hours to mow 4 lawns, how many lawns can be mowed in 35 hours? How long does it take to mow 17 lawns? 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 a percent. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

The Number System	<p>Apply and extend previous understandings of numbers to the system of rational numbers.</p> <ol style="list-style-type: none"> 1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions.
	<p>Compute fluently with multi-digit numbers and find common factors and multiples.</p> <ol style="list-style-type: none"> 1. Fluently divide multi-digit numbers using the standard algorithm. 2. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. 3. 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 100. 4. 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.
	<p>Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and graphing technology.</p>
Expressions and Equations	<p>Apply and extend previous understandings of arithmetic to algebraic expressions.</p> <ol style="list-style-type: none"> 1. Write and evaluate numerical expressions involving whole-number exponents. 2. Write, read, and evaluate expressions in which letters stand for numbers. <ol style="list-style-type: none"> a. Write expressions that record operations with numbers and with letters standing for numbers (<i>i.e.</i> Express "subtract y from 5" as $y - 5$). b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. c. Evaluate expressions at specific values of their variables (<i>For example, by using the formulas for volume and surface area</i>) 3. Apply the process of operations to generate equivalent expressions. (<i>For example, apply the distributive property to the expression $3(2 + y)$ to rewrite the expression as $6 + 3y$.</i>) 4. Identify when two expressions are equivalent (<i>i.e.</i>, $3y = y + y + y$ regardless of which number y stands for). <p>Reason about and solve one-variable equations and inequalities.</p> <ol style="list-style-type: none"> 5. Understand solving an equation or inequality as a process of answering a question: which values from a specified set make the equation or inequality true? 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 a number that changes from one situation to another. 7. Solve one step equations by undoing addition and multiplication. 8. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions. Graph the solutions on a number line. <p>Represent and analyze quantitative relationships between dependent and independent variables.</p> <ol style="list-style-type: none"> 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 in terms of the other.
Geometry	<p>Extend previous understanding of angles and angle measures.</p> <ol style="list-style-type: none"> 1. Use a protractor to measure an angle. 2. Find the missing measure of an angle in a triangle given the other two angles. <p>Solve real-world and mathematical problems involving area, surface area, and volume.</p> <ol style="list-style-type: none"> 1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and rectangles. 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 length. 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 x-coordinate or the same y-coordinate. 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.
Statistics and Probability	<ol style="list-style-type: none"> 1. Display numerical data in plots on a number line, including dot plots, stem and leaf plots, scatter plots, histograms, and box-and-whisker plots. 2. Summarize numerical data sets by giving quantitative measures of center (mean, median and mode) and variability (interquartile range and standard deviation). 3. Relate the choice of measures of central tendency to the shape of the data distribution and the context in which the data were gathered.
Science	Learning Goals
Content Strands	
	Understand the processes needed in scientific investigations
	Identify and use the metric units and tools of scientific measurements
	Predict and take accurate measurements

Earth Science	
	Examine maps to learn about Earth's surface features
	Explore fossils and the information they provide regarding Earth's history
	Investigate the changes in the Earth's surface over time
	Describe the main types of rocks and how are formed
	Explore the affects of plate motion on the rock cycle
	Examine the Earth's renewable and non-renewable resources
	Identify causes of climate change due to interaction of air masses
	Explore Earth's atmosphere and compare and contrast the six main climate regions of the world
	Examine the role of water on Earth
	Describe how the apparent motion of objects in the sky depends on motions of the Earth
	Describe the role of gravity in the formation of the solar system
	Compare and contrast the characteristics of the inner planets and outer planets
	Gather and synthesize information to identify the general categories of environmental issues
Social Studies	Learning Goals
Content Strand	<i>World Geography, History, and Cultures</i>
Knowledge of principles & processes of governance systems	Compare and contrast governmental systems, current and historical, including those that are democratic, totalitarian, monarchic, and theocratic and describe their impact.
Knowledge and continuity & change in the history of the world	Describe the dominant characteristics, contributions of, and interactions among major civilizations of Asia, Europe, Africa and the Middle East in ancient times
	Analyze the following developments related to the Renaissance and Reformation including: new ways of thinking, humanism, new developments in arts and their impact on later developments
	Identify and explain the major revolutions of the 18th and 19th centuries, including: political revolutions and the Industrial Revolution
	Describe the evolution of economic theories and practices, including: capitalism and socialism. Describe the social and political effects these have had on various societies.
	Evaluate European imperialism of the late 19th and 20th centuries and the independence movements in Africa and Asia
	Outline major demographic changes and migrations: their causes and consequences (rural to urban, less developed to more developed)
Knowledge of major elements of geographical study and analysis and their relationship to changes in society and the environment	Communicate locations of places by creating maps and describing their absolute and relative locations
	Describe physical characteristics and human characteristics that make specific places unique
	Explain how and why places change
	Explain how and why different people may perceive the same place in varied ways
	Explain how physical processes shape the earth's surface
	Describe the distribution and characteristics ecosystems and how they vary in biodiversity and productivity
	Analyze major patterns and issues with regard to population distribution, settlements, migrations, cultural and economic systems in the world
	Identify how changes in the physical environment may reduce the capacity of the environment to support human activity

	Describe major effects of changes in patterns of the movement of people, products and ideas
	Identify issues pertaining to the movement of people, products and ideas and evaluate ways to address those issues
	List and explain criteria that give regions their identities
	Explain how parts of a region relate to each other as a whole
	Explain how and why regions change
Knowledge of relationships of the individual & groups to institutions and cultural traditions	Compare and contrast the major ideas and beliefs of different cultures
	Analyze how the roles of class, ethnic, racial groups have changed in society
	Determine the causes, consequences and possible resolutions of cultural conflicts
Knowledge of the use of tools of social inquiry	Distinguish between primary and secondary sources
	Distinguish between fact and opinion and analyze sources to recognize bias and points of view
	Develop a research plan and identify appropriate resources for investigating social topics
	Interpret charts, statistics, charts, diagrams, graphs, timelines, pictures, political cartoons, written resources and artifacts

Language Arts	
Reading	Seventh Grade Learning Goals
Content Strand	
Comprehension Skills, Literary Analysis	Cite the textural evidence that most strongly supports an analysis of what the text says as well as inferences drawn from the text.
	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.
	Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot)
	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.
	Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.
	Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.
	Compare and contrast a written story, drama, or poem to its audio, filmed or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, camera angle)
	Compare and contrast a fictional portrayal of a time, place, or character and historical account of the same period as a means of understanding how authors of fiction use or alter history.
	For Informational Text:
	Cite several pieces of textual evidence to support analysis of what the text says as well as inferences drawn from the text.
	Determine two or more central ideas in a text and analyze their development over the course of the text; provide summary of text.
	Analyze the interactions between individuals, events and ideas in a text (e.g., how ideas influence individuals or events)
	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.
	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.
	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.
Writing	
Writing Process	Write arguments to support claims with clear reasons and relevant evidence. a. introduce claim, acknowledge alternate or opposing claims and organize the reason and evidence logically b. support claim(s) with logical reasoning and relevant evidence c. use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons and evidence d. provide a concluding statement that supports the argument presented
	Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization, and analysis of relevant content. a. introduce topic clearly; organize ideas using strategies such as clarification, comparison/contrast and cause/effect b. develop the topic with relevant facts, details or other information c. use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. d. provide a concluding statement that supports the information presented
	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 point of view, introducing a narrator or characters; organize an event sequence that unfolds naturally and logically. b. use narrative techniques, such as dialog, pacing and description to develop 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. provide a conclusion that follows form and reflects on the narrated events.

	With guidance and support, develop and strengthen writing as needed by planning, revising, editing and rewriting.
Language	
Conventions of: grammar, spelling, capitalization	
	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. use a comma to separate coordinate adjectives (e.g., <i>It was a fascinating, enjoyable movie</i>) b. spell correctly
	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.
	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content. a. use context b. use common, grade-appropriate Greek or Latin affixes and roots as clues c. consult reference materials
	Developing understanding of and applying proportional relationships.
Math	Learning Goals
Critical Areas of Focus	<ol style="list-style-type: none"> 1. Developing understanding of and applying proportional relationships. 2. Developing understanding of operations with rational numbers and working with expressions and linear equations. 3. Solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume. 4. Drawing inferences based on samples. 5. Investigating chance.
Content Strand	
Ratios and Proportional Relationships	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 $\frac{1}{2}$ mile in $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour (2 miles per hour).
	<ol style="list-style-type: none"> 2. Recognize and represent proportional relationships between quantities. <ol style="list-style-type: none"> a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. 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.
	3. Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
The Number System	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers

	<p>1. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.</p> <p>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.</p> <p>b. Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.</p> <p>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.</p> <p>d. Apply properties of operations as strategies to add and subtract rational numbers.</p>
	<p>2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p> <p>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.</p> <p>b. Understand that integers can be divided, provided that the 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.</p> <p>c. Apply properties of operations as strategies to multiply and divide rational numbers.</p> <p>d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p>
	<p>3. Solve real-world and mathematical problems involving the four operations with rational numbers.</p>
Expressions and Equations	Use properties of operations to generate equivalent expressions.
	<p>1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p> <p>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. <i>For example, $a + 0.05a = 1.05a$ means that "increase by 5% is the same as "multiply by 1.05"</i></p>
	<p>Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</p> <p>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.</p> <p>4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>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. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>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. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solution.</i></p>
Geometry	<p>Draw, construct, and describe geometrical figures and describe the relationships between them.</p> <p>1. Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p> <p>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.</p> <p>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.</p>

Statistics and Probability	<p>Use random sampling to draw inferences about a population.</p> <p>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.</p> <p>2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple sample (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>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.</i></p>
	<p>Draw informal comparative inferences about two populations.</p> <p>3. Use measure of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.</p>
	<p>Investigate chance processes and develop, use, and evaluate probability models.</p> <p>4. 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 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.</p> <p>5. Approximate the probability of a chance event by collectiong data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>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.</i></p> <p>6. 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.</p> <p>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>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 be selected.</i></p> <p>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>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.</i></p>
	<p>7. Find the probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p> <p>a. Understand that, just as with simple events, the probability of a compound event is the fraction of of outcomes in the sample space for which the compound event occurs.</p> <p>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 which compose the event.</p>
Science	Learning Goals
Content Strand	
	Examine the process involved in scientific inquiry
Life Science	
Structure and Function	Identify cell parts, functions and processes
	Provide evidence that organisms (unicellular and multicellular) are made of cells and that a single cell must carry out all of the basic functions of life
	Describe mitosis, meiosis and DNA
	Explore heredity, genetics and mutations
	Explain the Principles of Natural Selection
	Compare and contrast animal behaviors and reproduction
Human Body - Structure and Function	Investigate the 1. skeletal structure and movement,
	2. Digestion and excretion,

	3. Respiration and circulation,
	4. Immunity and disease,
	5. Nervous system,
	6. Senses,
	7. Endocrine system, and
	8. Growth and reproduction.
	9. Describe the stages of human development
	Describe how genetic variations of traits in a population increase some individuals probability of surviving and reproducing in a specific environment
	Describe the effects of drug, tobacco, and alcohol abuse on the body systems
Social Studies	Learning Goals
Content Strand	<i>Ancient World & Emergence of Early America</i>
History: Continuity and Change	Explain the connections between historical context and peoples' perspectives at the time in world history
	Analyze a chronological sequence of related events in world history
	Identify the essential elements of cultural development and diffusion (Ancient Mediteranean Civilizations, The Americas)
Governmental Systems and Principals	Determine how governmental systems affect individuals and groups in society
	Distinguish the powers and responsibilities of subjects and political leaders
Geographic Study	Identify and apply 6 elements of geography
	Apply globalgeography skills (mapping, evaluating, creating)
	Describe the impact of human settlement activities on the environmental and cultural characteristics of world regions
	Locate major cities of the world and key world nations; continents and oceans, major topographical features of the world
	Evaluate how geography influences the way people live, trade and organize governments
	Examine the adaptation of people to their environment
People, Groups and Cultures	Explain the connections between historical context and peoples' perspectives at the time in world history
	Identify the factors that determine the rise and fall of civilizations
	Analyze the structure of society and it's role in the creation and destruction of civilizations from ancient to modern era
	Apply the 5 factors of civilation (River Valley Civilizations)
	Examine the development of organized social structures (Ancient Asia and Africa)
	Describe the origins, structure and essential beliefs of Judaism, Hinduism, and Buddhism
	Explain the origin, structure, spread, and significant beliefs of Christianity
Economic Concepts	Explain how political and economic stability affects the well-being of individuals and society
American History	Explain connections between historical context and peoples' prespectives at the in United States history
	Examine the cause and affect of disputes between the Native Americans, United States government and White settlers
	Identify the causes and consequenes of the political and social politics of Great Britian and American Colonies
	Analyze the challenges and opportunities faced by those trying to address problems of the time
	Analyze the growth of the United States through westward expansion, exploration and imperialsim

	Analyze the cause and affect of slavery Cival War and Reconstruction on social, political and economic development
Government Systems and Principles	Analyze the Declaration of Independence and determine its affects on individuals and groups in society
	Identify and analyze the establishment of the government of the United States , the rights, responsibilities, and duties gaurenteed in the Constitution
	Identify the evolution of foreign and domestic policies

Language Arts	
Reading	Eighth Grade Learning Goals
Content Strand	
Comprehension Skills/ Literary Analysis	Cite the textural evidence that most strongly supports an analysis of what the text says as well as inferences drawn from the text.
	Determine a theme or central 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.
	Analyze how particular lines of dialogue or incidents in a story or drama propel the action.
	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.
	Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contribute to its meaning and style.
	Analyze how differences in the point of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effect as suspense or humor.
	Analyze how a modern work of fiction draws on themes, pattersns of events, or character types from myths, traditional stories, dramas and poems.
	<i>For Informational Text:</i>
	Cite the textural evidence that most strongly supports an analysis of what the text says as well as inferences drawn from the text.
	Determine a central idea of a text and analyze it's development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
	Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories)
	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.
	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.
	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.
	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.
Writing	
Writing Process	<p>Write arguments to support claims with clear reasons and relevant evidence</p> <ul style="list-style-type: none"> a. organize reasons and evidence logically b. support claims using accurate credible sources c. use words, phrases, and clauses to create cohesion and clarify the relationship among claims d. maintain a formal style e. provide concluding statement that supports the argument presented

	<p>Write informative/explanatory texts to examine a topic and convey ideas, concepts and information through the selection, organization and analysis of relevant content.</p> <ol style="list-style-type: none"> introduce a topic clearly (Include formatting, graphics, and multimedia when useful.) develop the topic with relevant facts, details, or other relevant information use appropriate transitions to clarify the relationships among ideas and concepts. provide a concluding statement
	<p>Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well structured event sequences.</p> <ol style="list-style-type: none"> engage and orient the reader by establishing a context and point of view, introducing a narrator or characters; organize an event sequence that unfolds naturally and logically. use narrative techniques, such as dialog, pacing and description to develop events and/or characters. use a variety of transition words, phrases and clauses to convey sequence and signal shifts from one time frame or setting to another provide a conclusion that follows form and reflects on the narrated events.
	With guidance and support, develop and strengthen writing as needed by planning, revising, editing and rewriting.
Language	
	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ol style="list-style-type: none"> explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences form and use verbs in active and passive voice form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood recognize and correct inappropriate shifts in verb voice and mood
	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing</p> <ol style="list-style-type: none"> use punctuation (comma, ellipsis, dash) to indicate a pause or break use an ellipsis to indicate an omission spell correctly
	<p>Use knowledge of language and its conventions when writing, speaking, reading, or listening</p> <ol style="list-style-type: none"> 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)
	<p>Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on 8th grade level</p> <ol style="list-style-type: none"> use context use common, grade-appropriate Greek or Latin affixes and roots as clues consult reference materials
	<p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <ol style="list-style-type: none"> interpret figures of speech (e.g., verbal irony, puns) in context use the relationship between particular words to better understand each of the words distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., <i>bullheaded</i>, <i>willful</i>, <i>firm</i>, <i>persistent</i>, <i>resolute</i>)
Math	

Critical Areas of Focus	<p>1. Formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations.</p> <p>2. Grasping the concept of a function and using functions to describe quantitative relationships.</p> <p>3. Working with irrational numbers, integer exponents and scientific notation.</p>
Content Strand	
Number and Quantity	<p>Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.</p> <p>Rewrite expressions involving radicals and rational exponents using the properties of exponents.</p> <p>Define appropriate quantities for the purpose of descriptive modeling. <i>For example when converting units of measure or finding unit rates.</i></p> <p>Analyze and compare measurements for precision and accuracy; choose an appropriate level of accuracy when reporting measurements.</p>
Algebra	<p>Interpret parts of an expression, such as terms, factors, and coefficients.</p> <p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression; factor a quadratic expression to reveal the zeros of the function it defines.</p> <p>Understand that polynomials form a system analogous to the integers; add and subtract polynomials, multiply polynomials.</p> <p>Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</p> <p>Solve a formula for a given variable; solve an equation in two or more variables for one of the variables.</p> <p>Solve linear equations and inequalities in one variable, including compound inequalities and absolute-value equations and inequalities.</p> <p>Solve systems of equations by graphing (manually and with a graphing calculator), substitution, and elimination.</p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).</p> <p>Graph the solutions to a linear inequality in two variables as a half-plane and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.</p> <p>Identify functions; Find the domain and range of relations and functions. Graph linear functions that represent real-world situations and give their domain and range.</p> <p>Graph functions given a limited domain; graph functions with a domain of real numbers.</p> <p>Use function notation, evaluate functions for inputs in their domains.</p> <p>Recognize and extend an arithmetic sequence; find a given term of an arithmetic sequence.</p> <p>Use the structure of an expression to identify ways to rewrite it (<i>For example; factor by using the greatest common factor; factor by grouping, factor trinomials.</i>)</p>
Functions	<p>Calculate and interpret the average rate of change of a function over a specified interval.</p> <p>Identify, write, and graph direct variation. Interpret the slope as a rate of change.</p> <p>Compare properties of functions algebraically, graphically, and numerically in tables.</p> <p>Describe how changing slope and y-intercept affect the graph of a linear function.</p> <p>Graph a line using slope-intercept form.</p> <p>Graph quadratic functions and show intercepts, maxima, and minima and give its domain and range.</p>
Geometry	<p>Use proportions to solve problems involving geometric figures; use proportions and similar figures to measure objects indirectly.</p> <p>Identify and graph parallel and perpendicular lines. Write equations to describe lines parallel or perpendicular to a given line.</p>

Statistics and Probability	Create and interpret scatter plots. Use trend lines to make predictions.
	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
	Compute (using technology) and interpret the correlation coefficient of a linear fit.
	Distinguish between correlation and causation.
Science	
Content Strand	Learning Goals
	Apply lab safety rules and Scientific Method to all lab investigations
	Understand the processes needed in scientific investigations
Physical Science:	
Structure and Properties of Matter	Describe general states of matter, physical and chemical properties
	Examine the properties of elements
	Recognize the chemicals on the periodic table
	Model the atomic composition of simple molecules and extended structures (electron dot diagram)
	Interpret data on the properties of substances before and after substances interact to determine the chemical change
	Describe elements and bonding
	Identify and explain the physical and chemical properties and changes of matter
	Explain the classification of matter: mixtures, solutions, elements, and compounds
	Define and locate the nucleus, protons, neutrons and electrons
	Use the Periodic Table to find the symbol, atomic number, average atomic mass, protons, neutrons, and electrons of any given element
	Explain and illustrate ionic and covalent bonds, oxidation number, formula formation
	Balance chemical equations
Forces and Motion and Energy	State and give examples of Newton's Law of Motion
	Define and give examples of force including forces in fluids
	Describe changes in particular motion, temperature and state of a substance when thermal energy is added or removed
	Examine light, sound, and electromagnetic waves
Social Studies	Learning Goals
Content Strand	
American History	Analyze the affects of the industrial revolution in regard to agriculture and urban changes
	Describe the causes and consequences of the United States' imperialism at home and abroad
	Analyze the reasons U.S. society has changed over time: The Progressive Era, Great Depression, the Cold War Era, and the Civil Rights Movement
	Identify the role of America in WWI, WWII, The Cold War and The Global War on Terrorism
	Evaluate the responses of the United States' leaders to the challenges of global tension
	Identify the changes in American domestic policy from the 20th to the 21st century
Government Systems and Principles	Civil Rights movements, Constitutional changes, and new forms of legislation

	Identify and analyze the evolution of the structure and power of the federal government , the rights, responsibilities, and duties gaurenteed in the Constitution
	Identify the evolution of foreign and domestic policies
	Analyze historical perspectives that led the the U.S. policy of neutrality during the early years of WWI
Geographic Study	Create and use maps in order to explain relationships and reveal patterns or trends in United State's history
	Identify and plot factire that contribute to cooperation and conflict among the United States and other nations of the world
	Identify ans analyze past and present changes in pysical systems in national and global contexts
	Explain how the expansion of industrialization, transportation and technological developments influenced different regions and the relationship among those regions
	Use maps to analyze how migration is linked to geographic, societal, and economic changes in society
Economic Concepts	Examine the emergence of the expaning economic crisis during the Progressive Era
	Summerize Roosevelt's New Deal and the American economy
	Analyze the the expansion of U.S. economic influenced in Latin America and the Pacific
	Examine the relationship between federal deficit, taxes, and federal spending
	Analyze the economic effects of globalization on the American economy
People, Groups and Cultures	Compare and contrast the perspectives of individuals and groups regarding the development of the American governmental system to explain emerging divisions and political philosophies
	Evaluate the effectiveness of various reform movements, laws, and events to determine their impact on the promise of American ideals.
	Examine the reasons the 1930s became the golden age of American entertainment and arts
	Examine how migration movements changed the racial makeup of America
	Analyze the way immigrants adapt to American society and retain their cultural identity
	Analyze the the civil rights movement changed American society
	Impact of the Vietnam Era on American society