

## 5th Grade – UNIT 1

<p><b>ELA KCAS</b></p>	<p><b>W.5.2:</b> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p><b>RL.5.2:</b> Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p> <p><b>RI.5.1:</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>RI.5.4:</b> Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.</p> <p><b>RF.5.3:</b> Know and apply grade-level phonics and word analysis skills in decoding words.</p> <p><b>RF.5.3(a):</b> 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> <p><b>W.5.7:</b> Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.</p> <p><b>SL.5.1:</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.</p> <p><b>SL.5.1(a):</b> Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</p> <p><b>SL.5.1(b):</b> Follow agreed-upon rules for discussions and carry out assigned roles.</p> <p><b>L.5.5:</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p>
<p><b>Math KCAS</b></p>	<p>5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.A.2 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 a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p>
<p><b>ELA Skills</b></p>	<p>Determine the theme of a story drama or poem.</p> <p>Determine how the characters in a story respond to challenges.</p> <p>Determine how the speaker in a poem reflects on a topic.</p> <p>Summarize a text.</p> <p>Quote accurately from a text when explaining what the text says.</p> <p>Draw inferences from a text.</p> <p>Interpret words and phrases in a text.</p> <p>Decode words.</p> <p>Conduct a short research project using several sources</p> <p>Engage in collaborative discussions</p> <p>Be prepared and follow rules during discussions.</p> <p>Demonstrate understanding of figurative language word relationships and nuances in word meanings.</p> <p>Read and comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>

<b>Math Targets</b>	<p>5.NBT.A.1 Recognize that a digit in one place represents ten times what it represents in the place to its right.</p> <p>Recognize that a digit in one place represents 1/10 of what it represents</p> <p>5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10.</p> <p>Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.</p> <p>Use whole-number exponents to denote powers of 10.</p>
---------------------	---

## 5th Grade – UNIT 2

<b>ELA</b>	<p><b>W.5.2:</b> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <p><b>RL.5.9:</b> Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.</p> <p><b>RI.5.2:</b> Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.</p> <p><b>RI.5.9:</b> Integrate information from several texts on the same topic in order to write or speak about the subject knowledgably.</p> <p><b>RF.5.4:</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p><b>RF.5.4(b):</b> Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.</p> <p><b>SL.5.1:</b> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.</p> <p><b>SL.5.1(c):</b> Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.</p> <p><b>SL.5.1(d):</b> Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.</p> <p><b>L.5.1:</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p><b>L.5.1(a):</b> Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.</p> <p><b>L.5.1(b):</b> Form and use the perfect (e.g., <i>I had walked</i>; <i>I have walked</i>; <i>I will have walked</i>) verb tenses.</p>
<b>Math</b>	<p><b>5.NBT.A.3</b> Read, write, and compare decimals to thousandths.</p> <p><b>5.NBT.A.3a</b> Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., <math>347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)</math>.</p> <p><b>5.NBT.A.3b</b> Compare two decimals to thousandths based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p> <p><b>5.NBT.A.4</b> Use place value understanding to round decimals to any place.</p>
<b>ELA Skills</b>	<p>Identify themes and topics</p> <p>Compare and Contrast stories in the same genre</p> <p>Determine main idea</p> <p>Connect key details to main idea</p>

	<p>Summarize text</p> <p>Integrate information from multiple texts and write or speak knowledgeably</p> <p>Write informative/explanatory texts to examine a topic and convey ideas clearly</p> <p>Read with sufficient accuracy and fluency to support comprehension</p> <p>Read on level prose and poetry with accuracy</p> <p>Engage in effective collaborative discussions by posing and responding to questions, drawing conclusions, and elaborating on key ideas</p> <p>Demonstrate command of the conventions when writing (e.g. conjunctions, prepositions, interjections, verb tenses)</p> <p>Read and comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>
<b>Math Targets</b>	<p>Read, write, and compare decimals to thousandths.</p> <p>Read and write decimals to thousandths using base-ten numerals, number names, and expanded form</p> <p>Compare two decimals to thousandths based on meanings of the digits in each place, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.</p> <p>Use place value understanding to round decimals to any place.</p>

### 5th Grade-UNIT 3

<b>ELA</b>	<p>Draw inferences from multiple sources in order to write an argument.</p> <p><b>W.5.1:</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <p><b>RL.5.1:</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>RI.5.1:</b> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>RI.5.7:</b> 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 efficiently.</p> <p><b>RF.5.4:</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p><b>RF.5.4(c):</b> Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p><b>SL.5.3:</b> Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.</p> <p><b>L.5.1:</b> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p><b>L.5.1(c):</b> Use verb tense to convey various times, sequences, states, and conditions.</p> <p><b>L.5.1(d):</b> Recognize and correct inappropriate shifts in verb tense.</p> <p><b>L.5.4:</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 5 reading and content</i>, choosing flexibly from a range of strategies.</p> <p><b>L.5.4(c):</b> Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.</p>
<b>Math</b>	<p>5.NBT.B.5 Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <p>5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and</p>

	<p>division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p> <p>5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as <math>2 \times (8 + 7)</math>. Recognize that <math>3 \times (18932 + 921)</math> is three times as large as <math>18932 + 921</math>, without having to calculate the indicated sum or product.</p>
<b>ELA Skills</b>	<p>Determine what the text says explicitly (Fiction and Nonfiction)</p> <p>Drawing inferences (Fiction and Nonfiction)</p> <p>Quote Accurately (Fiction and Nonfiction)</p> <p>Use multiple print/digital sources to locate answers and/or solve problems efficiently.</p> <p>Read with sufficient accuracy and fluency to support comprehension</p> <p>Use context clues to self-correct understanding and word recognition</p> <p>Write opinion pieces to support point of view with reasons and information</p> <p>Summarize points of a speaker and support claims</p> <p>Demonstrate command of the conventions when writing (e.g. shifts in verb tense)</p> <p>Determine multiple meaning words</p> <p>Use reference materials to clarify multiple meaning words</p> <p>Explain how an author uses reasons and shows evidence to support a text</p> <p>Read and comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>
<b>Math Targets</b>	<p>Fluently multiply multi-digit whole numbers using the standard algorithm.</p> <p>5.NBT.B.6 (See blue standards card)</p> <p>Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions, symbols.</p> <p>Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.</p>

**5th Grade – UNIT 4**

<b>ELA</b>	<p>Explain relationships or interactions in a text and describe how point of view influences those interactions and events in order to write a narrative.</p> <p><b>W.5.3:</b> Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <p><b>RL.5.6:</b> Describe how a narrator’s or speaker’s point of view influences how events are described.</p> <p><b>RI.5.5:</b> Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.</p> <p><b>RI.5.3:</b> Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.</p> <p><b>RF.5.4:</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p><b>RF.5.4(a):</b> Read on-level text with purpose and understanding.</p> <p><b>SL.5.4:</b> Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.</p>
------------	---

	<p><b>L.5.4:</b> Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 5 reading and content</i>, choosing flexibly from a range of strategies.</p> <p><b>L.5.4(b):</b> Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., <i>photograph, photosynthesis</i>).</p>
<b>Math</b>	5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
<b>ELA Skills</b>	<p>Determine a narrator's or speaker's point of view in a text.</p> <p>Describe how events in a text are influenced by point of view.</p> <p>Determined the overall structure of an informational text.</p> <p>Compare events, ideas, concepts or information in 2 or more texts.</p> <p>Analyze informational text and determine if the structure chosen effectively relates events, ideas, concepts, and information.</p> <p>Use specific information in a text to identify and explain the interactions between 2 or more individuals, events, ideas, and/or concepts.</p> <p>Read fluently and accurately to support comprehension.</p> <p>Use narrative techniques to develop events and/or experiences and show how characters respond to situations.</p> <p>Determine a logical sequence for presenting ideas and facts so that listeners can follow my line of reasoning.</p> <p>Determine and clarify the meaning of unknown words using a range of strategies.</p> <p>Use appropriate Greek and Latin affixes and roots.</p> <p>Read an comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>
<b>Math Targets</b>	<p>Add decimals to the hundredths place value.</p> <p>Subtract decimals to the hundredths place value.</p> <p>Multiply decimals to the hundredths place value</p> <p>Divide decimals to the hundredths place value</p> <ul style="list-style-type: none"> <li>- using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</li> <li>- relate strategy to a written method and explain the reasoning used</li> </ul>

## 5th Grade-UNIT 5

<p><b>ELA</b></p>	<p>Apply knowledge of the overall structure of literary texts in order to develop a real or imagined experience or event.</p> <p><b>RL.5.5:</b> Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.</p> <p><b>RL.5.7:</b> Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).</p> <p><b>RI.5.8:</b> Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).</p> <p><b>RF.5.4:</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p><b>W.5.3:</b> Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <p><b>W.5.5:</b> With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach..</p> <p><b>SL.5.2:</b> Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</p> <p><b>L.5.5:</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p>
<p><b>Math</b></p>	<p>5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, <math>\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}</math>. (In general, <math>\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}</math>.)</p> <p>5.NF.A.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result <math>\frac{2}{5} + \frac{1}{2} = \frac{3}{7}</math>, by observing that <math>\frac{3}{7} &lt; \frac{1}{2}</math>.</p> <p>5.NF.B.3 Interpret a fraction as division of the numerator by the denominator (<math>\frac{a}{b} = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>
<p><b>ELA Skills</b></p>	<p>Explain how a series of chapters, scenes, or stanzas fit together to provide the overall structure of a story, drama or poem.</p> <p>Analyze how visual elements and multimedia presentations add to the meaning, tone, and beauty of an original text.</p> <p>Explain how authors use reasons and evidence to support text.</p> <p>Read with sufficient accuracy and fluency to support comprehension.</p> <p>Write real or imagined experiences using effective techniques, descriptive details and a clear event sequence.</p> <p>Summarize information presented in different formats.</p> <p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p> <p>Read and comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>

<b>Math Targets</b>	<p>Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.</p> <p>Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators.</p> <p>Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.</p>
---------------------	--

## 5th Grade – UNIT 6

<b>ELA</b>	<p>Analyze how literary elements and perspectives shape a text.</p> <p><b>W.5.1:</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.</p> <p><b>RL.5.3:</b> Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).</p> <p><b>RI.5.6:</b> Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.</p> <p><b>RF.5.4:</b> Read with sufficient accuracy and fluency to support comprehension.</p> <p><b>W.5.6:</b> With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p> <p><b>W.5.8:</b> Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.</p> <p><b>SL.5.5:</b> Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.</p> <p><b>L.5.3:</b> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p><b>L.5.3(a):</b> Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.</p> <p><b>L.5.3(b):</b> Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.</p>
<b>Math</b>	<p>5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>5.NF.B.4a Interpret the product <math>(a/b) \times q</math> as a parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q \div b</math>. For example, use a visual fraction model to show <math>(2/3) \times 4 = 8/3</math>, and create a story context for this equation. Do the same with <math>(2/3) \times (4/5) = 8/15</math>. (In general, <math>(a/b) \times (c/d) = ac/bd</math>.)</p> <p>5.NF.B.4b Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> <p>5.NF.B.5 Interpret multiplication as scaling (resizing), by:</p>

	<p>5.NF.B.5a Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</p> <p>5.NF.B.5b Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence <math>a/b = (n \times a)/(n \times b)</math> to the effect of multiplying <math>a/b</math> by 1.</p> <p>5.NF.B.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.B.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.</p> <p>5.NF.B.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for <math>(1/3) \div 4</math>, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that <math>(1/3) \div 4 = 1/12</math> because <math>(1/12) \times 4 = 1/3</math>.</p> <p>5.NF.B.7b Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for <math>4 \div (1/5)</math>, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that <math>4 \div (1/5) = 20</math> because <math>20 \times (1/5) = 4</math>.</p> <p>5.NF.B.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share <math>1/2</math> lb of chocolate equally? How many <math>1/3</math>-cup servings are in 2 cups of raisins?</p>
<b>ELA Skills</b>	<p>Compare and contrast two or more characters, settings, or events</p> <p>Draw on specific details in the text in order to compare and contrast</p> <p>Analyze point of view of events or topics from multiple accounts</p> <p>Read with sufficient accuracy and fluency to support comprehension</p> <p>Use technology to publish writing in collaboration with others</p> <p>Recall and gather relevant information from experiences and/or sources</p> <p>Summarize and paraphrase information</p> <p>Use multimedia components to enhance the development of main ideas or themes</p> <p>Expand, combine, and reduce sentences for meaning</p> <p>Compare and contrast dialects used in stories, dramas, and/or poems</p> <p>Read and comprehend complex texts</p> <p>Produce clear &amp; coherent writing (task, purpose, audience)</p> <p>Draw evidence from text when writing</p> <p>Use appropriate grammatical structure and vocabulary</p>
<b>Math Targets</b>	<ul style="list-style-type: none"> <li>• Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</li> <li>• Interpret the product <math>(a/b) \times q</math> as <math>a</math> parts of a partition of <math>q</math> into <math>b</math> equal parts; equivalently, as the result of a sequence of operations <math>a \times q \div b</math>.</li> <li>• Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</li> <li>• Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths.</li> </ul>

	<ul style="list-style-type: none"> <li>• Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</li> <li>• Interpret multiplication as scaling (resizing) by: comparing the size of a product to the size of one factor on the basis of the size of the factor, without performing the indicated multiplication.</li> <li>• Interpret multiplication as scaling (resizing), by: Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number.</li> <li>• Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number.</li> <li>• Relate the principle of fraction equivalence <math>a/b = (nxa)/(nxb)</math> to the effect of multiplying <math>a/b</math> by 1 (Cross –multiplying to compare fractions).</li> <li>• Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</li> <li>• Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.</li> <li>• Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.</li> <li>• Interpret division of a whole number by a unit fraction, and compute such quotients.</li> <li>• Solve real-world problems involving division of unit fractions by non-zero whole numbers.</li> <li>• Solve real-world problems involving division of whole numbers by unit fractions.</li> </ul>
--	---

### Unit 7-Measurement (teacher created)

<b>Standards:</b>	<p><u>5.MD.A.1</u> Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p> <p><u>5.MD.B.2</u> Make a line plot to display a data set of measurements in fractions of a unit (<math>1/2</math>, <math>1/4</math>, <math>1/8</math>). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</p>
<b>Learning Targets:</b>	<ul style="list-style-type: none"> <li>• Convert among different-sized standard measurement units within a given measurement system.</li> <li>• Use these conversions in solving multi-step, real world problems.</li> <li>• Make a line plot to display a data set of measurements in fractions of a unit (<math>1/2</math>, <math>1/4</math>/ <math>1/8</math>).</li> <li>• Use operations on fractions for 5<sup>th</sup> grade to solve problems involving information presented in line plots.</li> </ul>

Coordinate plane 11.2 & 11.2,

<b>Standards:</b>	<p><u>5.G.A.1</u> Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).</p> <p>5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p> <p><u>5.OA.B.3</u> Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</p>
<b>Learning Targets:</b>	<ul style="list-style-type: none"><li>• Use a pair of perpendicular lines, called axes to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called it coordinates.</li><li>• Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond.</li><li>• Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.</li><li>• Interpret coordinate values of points in the context of the situation.</li><li>• Generate two numerical patterns using two given rules</li><li>• Identify apparent relationships between corresponding terms.</li><li>• Form ordered pairs consisting of corresponding terms from the two patterns, and the ordered pairs on a coordinate plane.</li></ul>

**Unit 9-Use MIF Unit 13**

<b>Standards:</b>	<p><u>5.G.B.4</u> Classify two-dimensional figures in a hierarchy based on properties.</p> <p><u>5.G.B.3</u> Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</p>
<b>Learning Targets:</b>	<ul style="list-style-type: none"><li>• Classify two-dimensional figures in a hierarchy based on properties.</li><li>• Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.</li></ul>

**Unit 10-Use MIF 14.1 and Unit 15**

<b>Standards:</b>	<p>N/A</p> <p>Needs to be covered in combination with Volume in Unit 15 (which is covered in standards)</p>
<b>Learning Targets:</b>	<ul style="list-style-type: none"><li>• Identify 3-dimensional figures in order to eventually calculate the volume for those 3-dimensional figures.</li></ul>

<p><b>Standards:</b></p>	<p>Teach as a review of 4<sup>th</sup> grade standards in correlation with 14.1.</p> <p>5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement...</p> <p>5.MD.C.3a A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.</p> <p>5.MD.C.3b A solid figure which can be packed without gaps or overlaps using <math>n</math> unit cubes is said to have a volume of <math>n</math> cubic units.</p> <p>5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p> <p>5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <p>5.MD.C.5a 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 same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <p>5.MD.C.5b Apply the formulas <math>V = l \times w \times h</math> and <math>V = b \times h</math> for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> <p>5.MD.C.5c Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p>
--------------------------	--

<p><b>Learning Targets:</b></p>	<ul style="list-style-type: none"> <li>• Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</li> <li>• A cube with side length 1 unit, called a “unit cube”, is said to have “one cubic unit” of volume, and can be used to measure volume.</li> <li>• Recognize a solid figure which can be packed without gaps or overlaps using <math>n</math> unit cubes is said to have a volume of <math>n</math> cubic units.</li> <li>• Measure volumes by counting unit cubes.</li> </ul>
---------------------------------	--

- Measure volumes by using cubic cm.
- Measure volumes by using cubic in.
- Measure volumes by using cubic ft.
- Measure volumes by using improvised units.
- Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes.
- Show that the volume is the same as would be found by multiplying the edge length, equivalently by multiplying the height by the area of the base.
- Represent threefold whole number products as volumes.
- Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
- Apply the formulas  $V = l \times w \times h$  and  $V = b \times h$  for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.
- Recognize volume as additive.
- Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volume of the non-overlapping parts.
- Apply to real world problems.