Interact Middle School Library
Grades: 5, 6, 7, 8
States: Common Core State Standards

Interact Middle School Library: FRACTION SPEED BUMPS: Fraction Challenges That Enhance and Review Basic Skills
Summary: Working in teams of three, students experiment with fractions, share their findings, and use logical reasoning. Marble rolling events, a paper racetrack, and a slow marble race are all part of the excitement. (9781560043867-INT848)

Common Core State Standards

Language Arts

Grade: **5** - Adopted **2010**

STRAND / DOMAIN	**CCSS.ELA-Literacy.RI.5**	Reading Standards for Informational Text
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	**CCSS.ELA-Literacy.RI.5.7**	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.
STANDARD	**CCSS.ELA-Literacy.RI.5.8**	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
STANDARD	**CCSS.ELA-Literacy.RI.5.9**	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
STRAND / DOMAIN	**CCSS.ELA-Literacy.RI.5**	Reading Standards for Informational Text
CATEGORY / CLUSTER		Range of Reading and Level of Text Complexity
STANDARD	**CCSS.ELA-Literacy.RI.5.10**	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.
STRAND / DOMAIN	**CCSS.ELA-Literacy.RF.5**	Reading Standards: Foundational Skills
CATEGORY / CLUSTER		Fluency
STANDARD	**CCSS.ELA-Literacy.RF.5.4**	Read with sufficient accuracy and fluency to support comprehension.
EXPECTATION	**CCSS.ELA-Literacy.RF.5.4a**	Read on-level text with purpose and understanding.
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.5**	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	**CCSS.ELA-Literacy.W.5.2**	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
EXPECTATION	**CCSS.ELA-Literacy.W.5.2b**	Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.5**	Writing Standards

CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.5.4	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.5.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
STANDARD	CCSS.ELA-Literacy.W.5.8	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.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.5.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
EXPECTATION	CCSS.ELA-Literacy.W.5.9b	Apply grade 5 reading standards to informational texts (e.g., ''Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]'').
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.5.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.5	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.5.1	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.
EXPECTATION	CCSS.ELA-Literacy.SL.5.1a	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.
EXPECTATION	CCSS.ELA-Literacy.SL.5.1b	Follow agreed-upon rules for discussions and carry out assigned roles.
EXPECTATION	CCSS.ELA-Literacy.SL.5.1c	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

Grade: **6** - Adopted **2010**

STRAND / DOMAIN	CCSS.ELA-Literacy.RI.6	Reading Standards for Informational Text
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes

STANDARD	CCSS.ELA-Literacy.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
EXPECTATION	CCSS.ELA-Literacy.W.6.2b	Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
STANDARD	CCSS.ELA-Literacy.W.6.8	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.6.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.6	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1a	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1b	Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1c	Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.6	Speaking and Listening Standards
CATEGORY / CLUSTER		Presentation of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.SL.6.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Grade: **7** - Adopted **2010**

STRAND / DOMAIN	CCSS.ELA-Literacy.RI.7	Reading Standards for Informational Text
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.ELA-Literacy.RI.7.3	Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

STRAND / DOMAIN	**CCSS.ELA-Literacy.W.7**	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	**CCSS.ELA-Literacy.W.7.2**	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
EXPECTATION	**CCSS.ELA-Literacy.W.7.2b**	Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.7**	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	**CCSS.ELA-Literacy.W.7.4**	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.7**	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	**CCSS.ELA-Literacy.W.7.7**	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
STANDARD	**CCSS.ELA-Literacy.W.7.8**	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.7**	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	**CCSS.ELA-Literacy.W.7.10**	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	**CCSS.ELA-Literacy.SL.7**	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	**CCSS.ELA-Literacy.SL.7.1**	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	**CCSS.ELA-Literacy.SL.7.1a**	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	**CCSS.ELA-Literacy.SL.7.1b**	Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.
EXPECTATION	**CCSS.ELA-Literacy.SL.7.1c**	Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
EXPECTATION	**CCSS.ELA-Literacy.SL.7.1d**	Acknowledge new information expressed by others and, when warranted, modify their own views.

Grade: **8** - Adopted **2010**

STRAND / DOMAIN	**CCSS.ELA-Literacy.W.8**	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	**CCSS.ELA-Literacy.W.8.2**	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection,

		organization, and analysis of relevant content.
EXPECTATION	CCSS.ELA-Literacy.W.8.2b	Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
STANDARD	CCSS.ELA-Literacy.W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.8.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.8	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1a	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1b	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1c	Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1d	Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

Mathematics

Grade: **5** - Adopted **2010**

STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.

CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.
STRAND / DOMAIN	CCSS.Math.Content.5.NF	Number and Operations--Fractions
CATEGORY / CLUSTER	CCSS.Math.Content.5.NF.A	Use equivalent fractions as a strategy to add and subtract fractions.
STANDARD	CCSS.Math.Content.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, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)
STANDARD	CCSS.Math.Content.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 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.
STRAND / DOMAIN	CCSS.Math.Content.5.NF	Number and Operations--Fractions
CATEGORY / CLUSTER	CCSS.Math.Content.5.NF.B	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
STANDARD	CCSS.Math.Content.5.NF.B.3	Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). 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. For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?
STRAND / DOMAIN	CCSS.Math.Content.5.NF	Number and Operations--Fractions
CATEGORY / CLUSTER	CCSS.Math.Content.5.NF.B	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
STANDARD	CCSS.Math.Content.5.NF.B.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
EXPECTATION	CCSS.Math.Content.5.NF.B.4a	Interpret the product (a/b) x q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a x q ÷ b. For example, use a visual fraction model to show (2/3) x 4 = 8/3, and create a story context for this equation. Do the same with (2/3) x (4/5) = 8/15. (In general, (a/b) x (c/d) = ac/bd.)
EXPECTATION	CCSS.Math.Content.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.
STANDARD	CCSS.Math.Content.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.
STRAND / DOMAIN	CCSS.Math.Content.5.NF	Number and Operations--Fractions
CATEGORY / CLUSTER	CCSS.Math.Content.5.NF.B	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
STANDARD	CCSS.Math.Content.5.NF.B.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
EXPECTATION	CCSS.Math.Content.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 (1/3) ÷ 4, and use a visual fraction model to

		show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) x 4 = 1/3.
EXPECTATION	**CCSS.Math.Content.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 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 x (1/5) = 4.
EXPECTATION	**CCSS.Math.Content.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 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?

Grade: **6** - Adopted **2010**

STRAND / DOMAIN	**CCSS.Math.Practice**	Mathematical Practices
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP1**	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP2**	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP3**	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP5**	Use appropriate tools strategically.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP6**	Attend to precision.
STRAND / DOMAIN	**CCSS.Math.Content.6.NS**	The Number System
CATEGORY / CLUSTER	**CCSS.Math.Content.6.NS.A**	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
STANDARD	**CCSS.Math.Content.6.NS.A.1**	Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for (2/3) ÷ (3/4) and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = ad/bc.) How much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of land with length 3/4 mi and area 1/2 square mi?

Grade: **7** - Adopted **2010**

STRAND / DOMAIN	**CCSS.Math.Practice**	Mathematical Practices
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP1**	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP2**	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP3**	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP5**	Use appropriate tools strategically.
CATEGORY / CLUSTER	**CCSS.Math.Practice.MP6**	Attend to precision.
STRAND / DOMAIN	**CCSS.Math.Content.7.NS**	The Number System
CATEGORY / CLUSTER	**CCSS.Math.Content.7.NS.A**	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
STANDARD	**CCSS.Math.Content.7.NS.A.1**	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line

		diagram.
EXPECTATION	CCSS.Math.Content.7.NS.A.1b	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.
EXPECTATION	CCSS.Math.Content.7.NS.A.1c	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.
EXPECTATION	CCSS.Math.Content.7.NS.A.1d	Apply properties of operations as strategies to add and subtract rational numbers.
STRAND / DOMAIN	CCSS.Math.Content.7.NS	The Number System
CATEGORY / CLUSTER	CCSS.Math.Content.7.NS.A	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
STANDARD	CCSS.Math.Content.7.NS.A.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
EXPECTATION	CCSS.Math.Content.7.NS.A.2a	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.
EXPECTATION	CCSS.Math.Content.7.NS.A.2c	Apply properties of operations as strategies to multiply and divide rational numbers.
STRAND / DOMAIN	CCSS.Math.Content.7.NS	The Number System
CATEGORY / CLUSTER	CCSS.Math.Content.7.NS.A	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
STANDARD	CCSS.Math.Content.7.NS.A.3	Solve real-world and mathematical problems involving the four operations with rational numbers.
STRAND / DOMAIN	CCSS.Math.Content.7.EE	Expressions and Equations
CATEGORY / CLUSTER	CCSS.Math.Content.7.EE.B	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
STANDARD	CCSS.Math.Content.7.EE.B.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

Grade: **8** - Adopted **2010**

STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.