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| **Common Core Strand** | **Cluster** | **Standard** | **Learning Targets**  5th Grade Math Curriculum Map – 3rd Quarter | **Resources** | **Textbook Correlation** | **Vocabulary** |
| **Number and Operations - Fractions** | **Apply and extend previous understandings of multiplication and division to multiply and divide fractions.** | 5.NF.7a 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.1 a. 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) × 4 = 1/3. | - I can use my understanding of division to divide fractions. - I can divide a fraction by a whole number.  - I can explain or illustrate my solution strategy using visual models or equations that represent the problem. | * <http://illuminations.nctm.org/LessonsList.aspx?grade=2&standard=1&standard=2&standard=3&standard=4&standard=5> * http://streaming.discoveryeducation.com | 11-4 Relating Division to multiplication of fractions CC-18 Dividing unit fractions by nonzero whole numbers | unit fraction |
| 5.NF.7b 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.1 b. 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 × (1/5) = 4. | - I can use my understanding of division to divide fractions. - I can divide a whole number by a fraction.  - I can explain or illustrate my solution strategy using visual models or equations that represent the problem. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * <http://illuminations.nctm.org/LessonsList.aspx?grade=2&standard=1&standard=2&standard=3&standard=4&standard=5> * http://streaming.discoveryeducation.com | 11-4 Relating Division to multiplication of fractions | Review vocabulary previously taught |
| **Number and Operations - Fractions** | **Apply and extend previous understandings of multiplication and division to multiply and divide fractions.** | 5.NF.7c 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. c. 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? | - I can use my understanding of division to divide fractions. - I can solve real world problems by dividing fractions and whole numbers. - I can explain or illustrate my solution strategy using visual fraction models or equations that represent the problem. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * http://streaming.discoveryeducation.com | 11-5A Dividing unit fractions by non-zero whole numbers | Review vocabulary previously taught |
| **Measurement and Data** | **Convert like measurement units within a given measurement system.** | 5.MD.1 1. 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. | - I can convert measurement units within a measurement system. - I can solve multi-step word problems using measurement conversions. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * <http://studyjams.scholastic.com/studyjams/jams/math/index.htm> * <http://illuminations.nctm.org/LessonsList.aspx?grade=2&standard=1&standard=2&standard=3&standard=4&standard=5> * <http://streaming.discoveryeducation.com>   Inchworm and a Half by Elinor J. Pinzes ; How Tall, How Short, How Far Away by David A. Adler; Millions to Measure by David M. Schwartz | 12-1, 14-1, 14-4 Customary units 12-2, 14-2, 14-3, 14-15 Metric units 14-3 Weight and Mass | • relative size • liquid volume • mass • length • kilometer • meter • centimeter • kilogram • gram, liter • milliliter • inch • foot • yard • mile • ounce • pound • cup • pint • quart • gallon • hour • minute • second (includes abbreviations) • conversion and conversion factor |
| **Measurement and Data** | **Represent and interpret data.** | 5.MD.2 2. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). 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. | - I can make a line plot displaying fractions and solve problems using the fractions from the line plot. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * <http://studyjams.scholastic.com/studyjams/jams/math/data-analysis/line-plots.htm> * http://streaming.discoveryeducation.com | Use 18-1 to teach line plots, but using measurement data instead of surveys 18-2A Making Line Plots 18-2B Measurement Data | • line plot |
| **Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.** | 5.MD.3a 3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. 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. | - I can define and understand the concept of volume. - I can recognize one cubic unit of volume. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * http://streaming.discoveryeducation.com | 13-5A Models and Volume 13-5 Volume 13-4 Views of Solids | • cubic unit • attribute |
| 5.MD.3b 3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. | - I can define and understand the concept of volume. - I understand that volume is measured using cubic units to completely fill a solid figure. | * <http://illuminations.nctm.org/LessonsList.aspx?grade=2&standard=1&standard=2&standard=3&standard=4&standard=5> * http://streaming.discoveryeducation.com | 13-5A Models and Volume  13-5 Volume | Review vocabulary previously taught |
| **Measurement and Data** | **Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.** | 5.MD.4 4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. | - I can measure volumes using various units. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * http://streaming.discoveryeducation.com | 13-5A Models and Volume | Review vocabulary previously taught |
| 5.MD.5a 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. 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. | - I can solve volume problems using multiplication and addition. - I can solve real world problems involving volume. - I can find the volume of a right rectangular prism by using models and solving equations. | * <http://studyjams.scholastic.com/studyjams/jams/math/measurement/volume.htm> * http://streaming.discoveryeducation.com | 13-5A Models and Volume  13-5 Volume | right rectangular prism |
| **Measurement and Data** | **Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.** | 5.MD.5b 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas V = l × w × h and V = b × 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. | - I can solve volume problems using multiplication and addition. - I can solve real world problems involving volume. - I can use formulas to find the volume of rectangular prisms. | * <http://www.k-5mathteachingresources.com/5th-grade-number-activites.html> * http://streaming.discoveryeducation.com | 13-5A Models and Volume  13-6 Combining Volume | Review vocabulary previously taught |
| 5.MD.5c 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. 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. | - I can solve volume problems using multiplication and addition. - I can solve real world problems involving volume. - I can find the volume of solid figures by finding the volumes of rectangular prisms within the figure and adding the volumes together. | * http://streaming.discoveryeducation.com | 13-5 Volume  13-6 Irregular shapes & solids 13-6A Combining volume | Review vocabulary previously taught |