

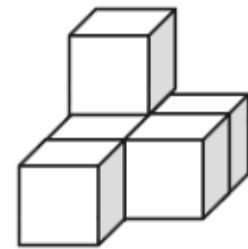


DISTRICT OF COLUMBIA  
PUBLIC SCHOOLS

## A Story of Units...

# Expanding on Operations

Fifth grade math classes will work on several different skills this quarter. Their computational skills will progress towards abstract mastery with fractions and decimals. To practice these skills, students will continue to study measurement, area, and volume.



### In Module 4 we will:

- **Use and evaluate** parentheses, brackets, and braces in numerical expressions
- **Write** simple expressions to record calculations
- **Perform** the four operations on decimals to the hundredths
- **Understand** a fraction as a division of the numerator by the denominator
- **Multiply** fractions using visual representations and later algorithms
- **Interpret** multiplication as resizing
- **Solve** real world word problems involving multiplication of fractions and mixed numbers
- **Divide** fractions by whole numbers and whole numbers by fractions
- **Convert** units within a measurement system
- **Make and interpret** line plots

$$\frac{4}{5} \times \frac{2}{1} = \frac{8}{5} \text{ or } 1\frac{3}{5}$$

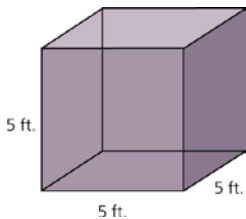

$$\frac{1}{2} \times \frac{2}{1} = 1 \text{ - Reciprocal}$$

### In Module 5 we will:

- **Recognize** volume as an attribute of solid figures and understand concepts of volume measurement

- **Measure** volumes by counting unit cubes and using measurement systems
- **Connect** volume to the operations of multiplication and addition to solve problems
- **Understand** that a figure can belong to a category as well as a sub category based on attributes
- **Classify** two-dimensional figures based on characteristics

## Enrichment Activities

In school, your child will...	At home, your child can...
<p><b>Practice</b> multiplication skills on a variety of application problems including volume.</p> 	<p><b>Calculate</b> the volume of a box given the dimensions of the sides.</p> 

## Focus Standards for Mathematical Practice

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively; students represent quantities with numerals
- Use reasoning to construct arguments and think about the reasoning of others
- Model decompositions by drawing and writing (such as 3 can be broken into 1 and 2)
- Use tools strategically and appropriately
- Use precision and focus when solving a problem
- Look for and make use of structure

## Fluency Focus

Students will work on operational fluency with fractions as they move towards abstract representations.

$$2\frac{2}{3} + 3\frac{1}{4} + 1\frac{5}{6}$$