Packet 12: Measurement Conversions and Percent

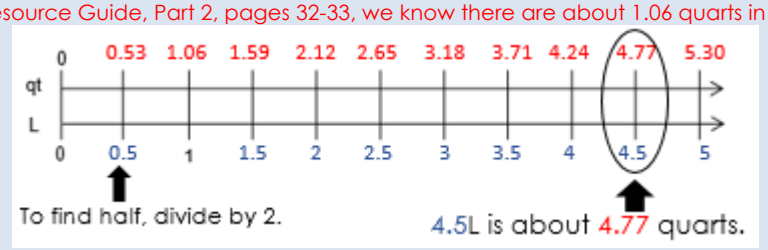
Dear Parents/Guardians,

In Packet 12, students solve measurement and percent of number problems in a variety of ways. They use double number lines, tables, equivalent fractions, 'chunking' and division to make sense of the problems they are solving.

Measurement Conversions with Double Number Lines

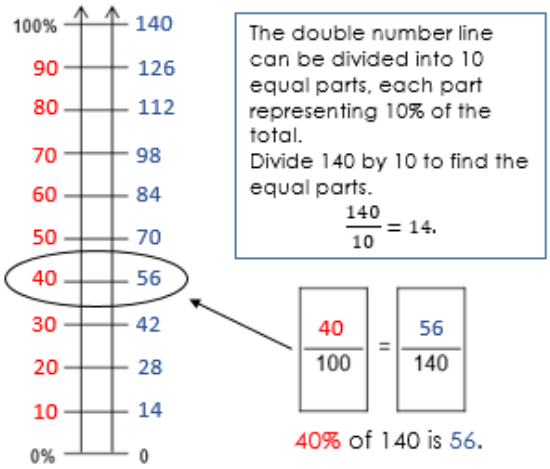
Students will use double number lines to solve measurement problems.

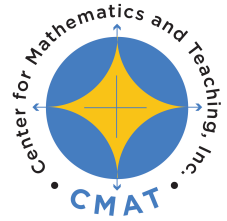
Example: About how many quarts would 4.5 liters be?
Using Resource Guide, Part 2, pages 32-33, we know there are about 1.06 quarts in a liter



Percents of Numbers with Double Number Lines

Students can also use double number lines to find the percent of a number. They will use the double number line to write equivalent fractions to represent the percent problem.





By the end of the packet, your student should know…

How to convert measurements within and between measurement systems
Lesson 12.1

How to convert between fraction, decimal and percent representations Lesson 12.2

How to use double number lines to solve measurement and percent problems
Lessons 12.1, 12.2, and 12.3

Use chunking, multiplication, division and equations to solve percent problems
Lessons 12.2 and 12.3

Additional Resources

Resource Guide (RG) Part 2, pages 32-33 (measurement) and pages 34-37 (percent)

Chunking to Find Percents of Numbers

Students find friendly percents of numbers. They can then chunk parts of percents together to find other percents of numbers.

Example: Find 32% of $150.

Amount of $	Find 100%	Find 10%	Find 1%
$150	$150	$15	$1.50
	100% is always the whole amount	10% is $\frac{1}{10}$ of 100% Find $\frac{1}{10}$ of $150 to get 10%. $\frac{\$150}{10} = \$15$	1% is $\frac{1}{100}$ of 100% Find $\frac{1}{100}$ of $150 to get 1%. $\frac{\$150}{100} = \$1.50$

One way to use chunking to find 32% of $150:

32% of a number = 10% + 10% + 10% + 1% + 1% of that number Or 32% of a number = 3(10%) +2(1%) of that number
32% of $150 = 3($15) + 2($1.5) = $45 + $3 = $48