

Lesson Notes

12.2

NAME _____

Module 12 Attributes and Tools
Lesson 2 Same System Conversions

Lesson Objectives

- Make conversions within the same measurement system, either customary or metric, in real-world problems (e.g. hours to minutes to seconds, meters to centimeters, feet to inches, liters to milliliters, quarts to gallons, etc).
- Make conversions using time in real-world problems.

Subtopic 1 Converting Customary Units

Length

$$12 \text{ in.} = 1 \text{ ft}$$

$$3 \text{ ft} = 1 \text{ yd}$$

$$\underline{\hspace{1cm}} \text{ yd} = 1 \text{ mi}$$

$$\underline{\hspace{1cm}} \text{ ft} = 1 \text{ mi}$$

Weight

$$\underline{\hspace{1cm}} \text{ oz} = 1 \text{ lb}$$

$$\underline{\hspace{1cm}} \text{ lb} = 1 \text{ T}$$

Capacity

$$8 \text{ fl oz} = 1 \text{ c}$$

$$\underline{\hspace{1cm}} \text{ c} = 1 \text{ pt}$$

$$2 \text{ pt} = 1 \text{ qt}$$

$$\underline{\hspace{1cm}} \text{ qt} = 1 \text{ gal}$$

1 Ruby must be at least 48 inches tall in order to ride the Flying Super Saturator. She is four feet, eight inches tall. Is Ruby tall enough to ride? Explain.

2 Eddie's moon dog weighs 234 ounces. What is the dog's weight in pounds and ounces?

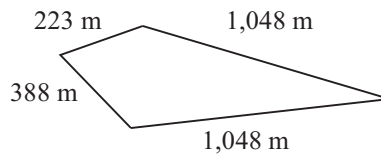
3

Luria drank five cups of water after her walk. How many pints did she drink?

Subtopic 2 Converting Metric Units

4

The diagram shows the course for a walk-a-thon. Julio's goal is to walk five kilometers. He walks the perimeter of the course twice. Does Julio reach his goal? Explain.



5

An Earth math book has a mass of five kilograms. What is the mass in grams?

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Module 12 **Attributes and Tools**
Lesson 2 **Same System Conversions**



A bathroom sink holds 4,500 milliliters of water. How many liters does it hold?

Subtopic 3 **Converting Time Units**

Time Unit Equivalents

60 seconds (sec) = 1 minute (min)

___ minutes (min) = 1 hour (h)

24 hours (h) = 1 day (d)

7 days (d) = 1 week (wk)

12 months (mo)

1 year (yr) = 52 weeks (wk)

_____ days (d)

10 yr = 1 decade

100 yr = 1 _____

_____ yr = 1 millennium



Jermaine finished a race in three minutes, 45 seconds. What was his time in seconds?