Unit and Rate Conversions
Day 2

N.Q.1 Use units of measure (linear, area, capacity, rates, and time) as a way to understand problems

b. Convert units and rates using dimensional analysis (English–to–English and Metric– to–Metric **without conversion factor provided** and between English and Metric **with conversion factor**)

Vocabulary

<u>Rate</u> - a unit of measure that includes both an amount and a time frame. For instance, miles per hour OR words per minute.

What am I learning today?

How to convert using rates with different units

How will I show that I learned it?

Solve a word problem which represents a conversion factor as a rate

Advanced Unit Conversions

Sometimes it is necessary to go between different types of measurement (English to metric). In these problems the unit conversion will be given to you.

Ex. 1 Convert 30 inches to meters. Use 1 inch = 2.54 cm.

$$\dfrac{30 \text{ in}}{} \left| \dfrac{2.54 \text{ cm}}{1 \text{ in}} \right| \dfrac{1 \text{ m}}{100 \text{ cm}}$$

Khd U d c m

1 m = 100 cm

$$\dfrac{76.2}{100} = \boxed{0.762 \text{ m}}$$

Ex. 2 Convert 4 lbs to grams. Use 1 oz = 28.35 grams.

$$\dfrac{4 \text{ lbs}}{} \left| \dfrac{16 \text{ oz}}{1 \text{ lbs}} \right| \dfrac{28.35 \text{ g}}{1 \text{ oz}} = \dfrac{1814.4}{1}$$

$$\boxed{1{,}814.4 \text{ g}}$$

Pg. 15 Omit 2, 3

Pg. 16 Omit 8, 10, 11, 14-17

add

* Pg. 18   1-6 ALL

skip
17

HW — #14 total