

HAPPY MONDAY!

1. Papers are being passed out just leave them out and I will answer questions as a class
2. Get a whiteboard and a marker. Just grab a kleenex to use as an eraser.
3. Problem of the Day

m }
D }
cm

1000

$$10 \text{ m} = \underline{1000} \text{ cm}$$

$$\frac{1 \text{ m}}{100 \text{ cm}} = \frac{10 \text{ m}}{1000 \text{ cm}}$$

$$100 \times 10 = 1000$$

Practice

Steps:

1. Identify the conversion rate that is needed to solve the problem.
2. Set up the proportion- 2 equal ratios
3. Solve the problem by cross multiplying and dividing by the left over number.

$$100 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$$

$$1 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$$

$$160 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$14 \text{ km} = \underline{\hspace{2cm}} \text{ m}$$

$$109 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$$

$$250 \text{ m} = \underline{\hspace{2cm}} \text{ km}$$

Whiteboard Review

1) $5.9 \text{ hm} = \underline{59,000} \text{ cm}$

2) $9,726 \text{ g} = \underline{9.726} \text{ kg}$

3) $15.49 \text{ L} = \underline{15,490} \text{ ml}$

H B D C
A
E

$$\frac{1 \text{ hm}}{10000 \text{ cm}} =$$

Whiteboard Review

4) $5.6 \text{ km} = \underline{5,600} \text{ m}$

5) $880 \text{ cg} = \underline{8.8} \text{ g}$

6) $1,000 \text{ ml} = \underline{1} \text{ L}$

Converting between systems

Units of Length

Customary	Metric
1 inch (in.)	\approx 2.54 centimeters (cm)
1 foot (ft)	\approx 0.30 meter (m)
1 yard (yd)	\approx 0.91 meter (m)
1 mile (mi)	\approx 1.61 kilometers (km)

Units of Weight/Mass

Customary	Metric
1 pound (lb)	\approx 453.6 grams (gm)
1 pound (lb)	\approx 0.4536 kilogram (kg)
1 ton (T)	\approx 907.2 kilograms (kg)

Units of Capacity

Customary	Metric
1 cup (c)	\approx 236.59 milliliters (mL)
1 pint (pt)	\approx 473.18 milliliter (mL)
1 quart (qt)	\approx 946.35 milliliter (mL)
1 gallon (gal)	\approx 3.79 liters (L)

Units of Length

Customary	Metric
1 inch (in.)	≈ 2.54 centimeters (cm)
1 foot (ft)	≈ 0.30 meter (m)
1 yard (yd)	≈ 0.91 meter (m)
1 mile (mi)	≈ 1.61 kilometers (km)

$$\frac{1 \text{ yd}}{0.91 \text{ m}} = \frac{3 \text{ yd}}{x}$$

$$0.91 \times 3 = 2.73$$

$$400 \text{ m} = \underline{1333.3} \text{ ft}$$

$$3 \text{ yd} = \underline{2.73} \text{ m}$$

$$\frac{1 \text{ ft}}{0.3 \text{ m}} = \frac{x}{400 \text{ m}}$$

$$3 \overline{) 4000}$$

$$\underline{-3000}$$

$$1000$$

$$\underline{-900}$$

$$100$$

$$\underline{-90}$$

$$10$$

$$\underline{-9}$$

$$1$$

Units of Weight/Mass

Customary	Metric
1 pound (lb)	≈ 453.6 grams (gm)
1 pound (lb)	≈ 0.4536 kilogram (kg)
1 ton (T)	≈ 907.2 kilograms (kg)

$$2 \text{ lb} = \frac{907.2}{453.6} \text{ g} = \frac{2}{1} \text{ lb}$$

$453.6 \times 2 = 907.2$

$$2 \text{ lb} = \frac{.9072}{.4536} \text{ kg} = \frac{2}{1} \text{ lb}$$

Units of Capacity

Customary	Metric
1 cup (c)	≈ 236.59 milliliters (mL)
1 pint (pt)	≈ 473.18 milliliter (mL)
1 quart (qt)	≈ 946.35 milliliter (mL)
1 gallon (gal)	≈ 3.79 liters (L)

$$4 \text{ gallons} = \underline{15.16} \text{ L}$$

$$473.18 \text{ mL} = \underline{2} \text{ c}$$