

Today's Learning Goal(s):

By the end of the class, I will be able to:

- a) convert from imperial to metric units, and metric to imperial units
- b) convert to a different unit **within** the metric system.

6.1.2 Converting between Imperial and Metric Units (Spring 2016)-s16.notebook

6.1.2 Converting between Imperial and Metric Units

Date: May 13/16

When converting **from Imperial** to Metric:

Use the **front** of the conversion card (6.1.1)

Find the unit you are given on the chart, and immediately multiply by the factor given to convert to metric.

Then, if necessary, move the decimal place appropriately to achieve the required metric unit.

Ex.1 Convert the following:

a) 27 inches to mm

$$27 \times 2.5 = \underline{67.5} \text{ cm}$$

$$\underline{67.5} \text{ cm} = \underline{675} \text{ mm}$$

b) 1200 yards to km

$$1200 \times 0.9 = \underline{1080} \text{ m}$$

$$\underline{1080} \text{ m} = \underline{1.08} \text{ km}$$

c) 4 teaspoons to cL

$$4 \times 5 = \underline{20} \text{ mL}$$

$$\underline{20} \text{ mL} = \underline{2} \text{ cL}$$

When converting **from Metric** to Imperial:

Use the **back** of the conversion card (6.1.1)

Look for the required imperial unit in the right column.

If the given metric unit is not in the left column,

move the decimal place appropriately to achieve an equivalent metric unit. (See next page for Metric review)

Then multiply by the factor given to convert to imperial.

Ex.2 Convert the following:

a) 7300 m to miles

$$7300 \text{ m} = \underline{7.3} \text{ km}$$

$$\underline{7.3} \text{ km} \times 0.6 = \underline{4.38} \text{ miles}$$

b) 2 L to fluid ounces

$$2 \text{ L} = \underline{2000} \text{ mL}$$

$$\underline{2000} \text{ mL} \times 0.03 = \underline{60} \text{ fl.oz}$$

Note:

Many answers in the solutions section will not match your answers.

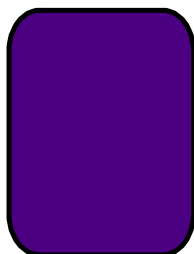
They are most likely more accurate, but the conversion sheet we are using has already been rounded.

See next page for Metric review

Answers:

- Ex1. a) 27 inches = 67.5 cm
67.5 cm = 675 mm
b) 1200 yards = 1080 m
1080 m = 1.08 km
c) 4 tsp = 20 mL
20 mL = 2 cL

- Ex2. a) 7300 m = 7.3 km
7.3 km = 4.38 mi
b) 2 L = 2000 mL



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km hm dam m dm cm mm

deci

dera

3 m 300 cm 3000 mm

6 dam 60 m

0.005 km

0.5 dam 5 m

400 m 4000 dm

L

g