

**Diagnostic Activity1**

Circle the unit of measure that is appropriate

Amount in a can of pop	355 mL	3 C
My height	68 cm	5 ft 6 in
On the highway I can drive	100 km/h	25 miles/h
The weight of a truck	20 kg	1000 lbs
The temperature outside in July	24°F	24°C
The oven temperature to cook French fries	400°F	400°C

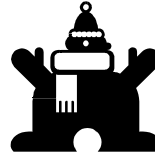
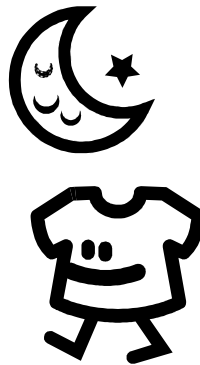
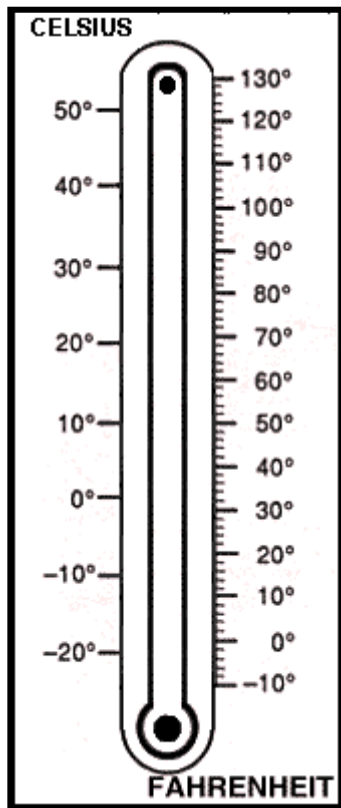


## Diagnostic Activity 2

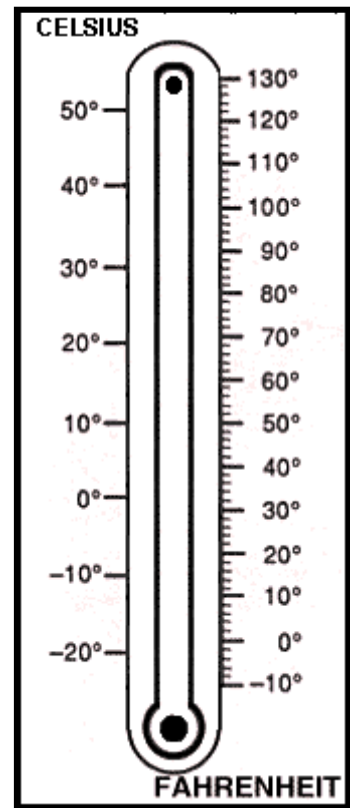
### Instructions

- Cut out each shape.
- Paste each thermometer onto a sheet of paper
- Glue the time of day and matching clothing onto each thermometer at the appropriate temperature.

September 15<sup>th</sup>



January 15<sup>th</sup>





## Converting Between Metric and Imperial Units

Suggested Time: 45 minutes

### What's important in this lesson:

In this lesson, you will learn how to work with approximate relationships between units of measure in the Metric and Imperial systems.

### Complete these steps:

1. Read through the lesson portion of the package on your own.
2. Complete the exercises.
3. Check your answers with the Answer Key that your teacher has.
4. Seek assistance from the teacher as needed.
5. Complete the Assessment and Evaluation and hand it in. Be sure to ask for assistance if you need it.

### Hand in the following:

1. Diagnostic Activity 1 and 2
2. Practice Problems
3. Converting Measures Evaluation

### Questions for the teacher:



## From Metric to Imperial and Back Again

### Part A: Conversions

Use the chart below to convert between METRIC and IMPERIAL units.

Distance		Capacity	Mass
1 cm = 0.4 in	1 in = 2.5 cm	1 L = 4 C	1 kg = 2.2 lbs
1 m = 1.1 yds	1 foot $\approx$ 30 cm	1 gal = 4 L	
1 yd = 0.9 m	1 mi = 1.8 km		

\* MAT2L will focus on Capacity and Mass conversions.

### Examples

2.5 L is \_\_\_\_\_ C.

77 lbs is \_\_\_\_\_ kg.

$2.5 \times 4 \text{ C per L} = 10 \text{ C}$

$77 \div 2.2 \text{ lbs per kg} = 35 \text{ kg.}$

So... 2.5 Litres is 10 Cups.

So... 77 pounds is 35 kilograms.

### Practice

1. Convert each measurement to the unit specified.

a) 20 L = \_\_\_\_\_ gal

b) 25 gal = \_\_\_\_\_ L

c) 15 C = \_\_\_\_\_ L

d) 2.5 L = \_\_\_\_\_ C

e) 25 kg = \_\_\_\_\_ lb

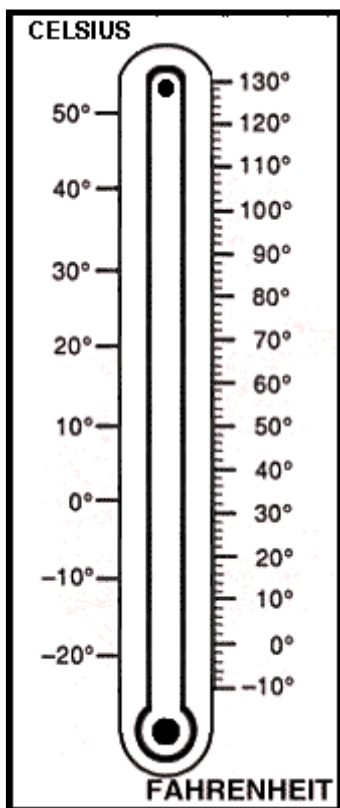
f) 130 lb = \_\_\_\_\_ kg

### Part B: Temperature

In Canada, temperature is recorded in Degrees Celsius ( $^{\circ}\text{C}$ ).

In the United States, temperature is recorded in Degrees Fahrenheit ( $^{\circ}\text{F}$ ).

Because Canada and the United States are neighbouring countries, understanding the relationship between Celsius and Fahrenheit is an important skill.



Some Important Temperatures

69°F = 19°C (room temperature)  
 75°F = 25°C  
 85°F = 32°C  
 32°F = 0°C (freezing point of water)

Practice

Convert each of the following:

Use the thermometer to complete the table:

Temperature in °C	10			22	
Temperature in °F		-10	90		0



## Converting Measures Evaluation

1. Convert the following temperatures. [3]

a)  $50^{\circ}\text{C} = \underline{\hspace{2cm}}^{\circ}\text{F}$       b)  $82^{\circ}\text{F} = \underline{\hspace{2cm}}^{\circ}\text{C}$       c)  $-20^{\circ}\text{F} = \underline{\hspace{2cm}}^{\circ}\text{C}$

2. If the temperature was  $-40^{\circ}\text{C}$ , estimate the temperature in degrees Fahrenheit. [1]

3. At what temperature would you cook chicken fingers? Circle the correct answer [1]

400°F

500°C

4. Convert the following: [6]

a) 6 C =          L.

b) 45 kg is                      lb.

c) 25 L is                      C.

d) 4 gal is                      L.

e) 185 lb is                      kg.

f) 10 gal =                      L.

5. Convert 175 pounds to grams. Show your work. [2]

175 lb =                      g.