Lesson 1.5: Conversions Between SI and Imperial

Complete the *Practice* below. When you have completed all the questions for *Lesson 1.5 Practice – VI* with your best work, mark your work by first comparing your answers to the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.

Practice – VI

1. Why are there two conversion ratios listed for each pair of measurements listed in the conversion table in *Lesson 1.5*?

   _____

   _____

   _____

   _____

2. Complete the following conversions.

   a. 10 m to yd

   b. 159 lbs to kg

   c. 34 miles per hour to kilometres per hour

3.   The diagram shows a thermometer with both Celsius and Fahrenheit scales.

a.   Describe how a thermometer with both scales can be used to convert between °C and °F.

_____

_____

b.   Use your strategy to convert

i. 50°C to °F

ii. −10°F to °C

c.   So far in this *Unit* you have always been able to use a proportion to convert between units. Explain why you cannot use the same strategy to convert between Celsius and Fahrenheit. (Hint: Zero will be important to your explanation.)

_____

_____

_____

_____

_____

_____

_____

° F	° C
230	110
220	
210	100
200	
190	90
180	80
170	
160	70
150	
140	60
130	
120	50
110	40
100	
90	30
80	
70	20
60	
50	10
40	
30	0
20	
10	-10
0	-20
-10	
-20	-30
-30	
-40	-40
-50	
-60	-50

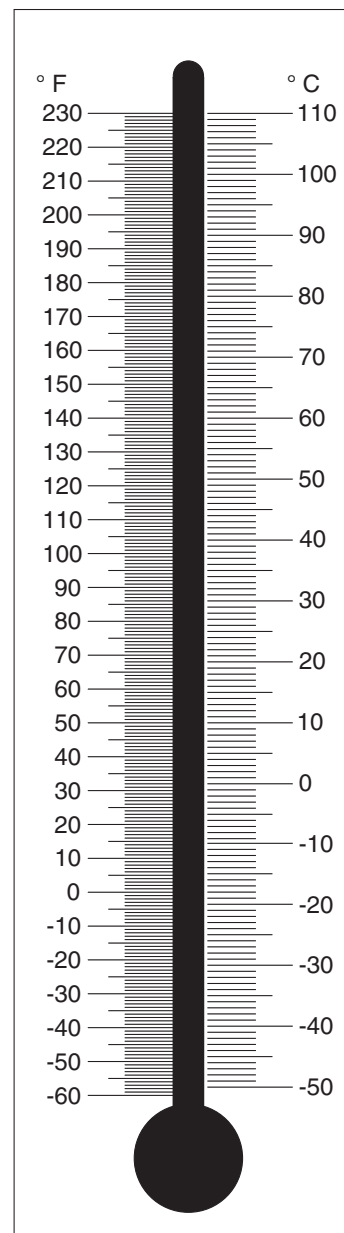*© ADLC*

4.   You are considering purchasing one of two used vehicles. Online, you have found that one vehicle has a fuel economy of 36 mi/gal and the other has a fuel economy of 7.2 L/100 km. Assuming imperial gallons were used, which of the two vehicles is more fuel efficient? Be sure to explain your reasoning.

Mark your work for *Lesson 1.5 Practice – VI* using the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.
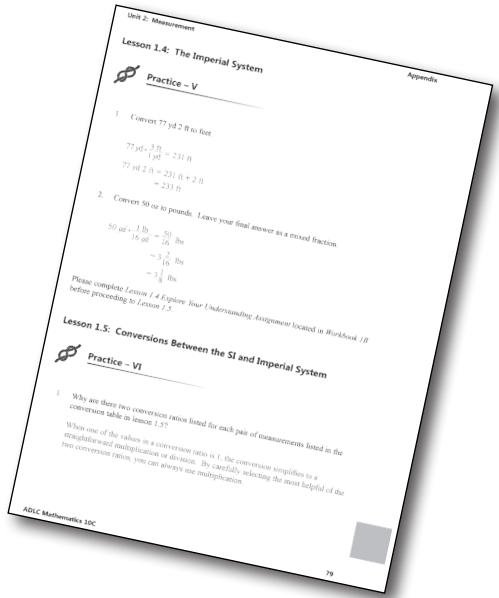
Transfer your self-assessed mark to the front cover of the *Workbook*.

My self-assessed mark on *Lesson 1.5 Practice – VI* is _____.

Reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.

Question Number	Got it!	Almost there…	Need to retry or ask for help.
1			
2			
3			
4			

Please go to *Appendix* to check your solutions before proceeding to *Explore Your Understanding Assignment* on the next page of this *Workbook*.

Note: Before you complete *Explore Your Understanding* you may review your skills and get more practice by completing the following problems in *Mathematics 10*.

• Page 42, #1, 2, 4, 5, 7, 8, 10, 12

Check your work in *Enhance Your Understanding*.