

**GRADE 10 ESSENTIAL
UNIT C – MEASUREMENT
CONVERT IMPERIAL ↔ METRIC**

Name: _____

Date: _____

Show work. (*always*)

Use the proportion method, unless you prefer the factor method.

Use a calculator for sure. Round final answers to two decimal places if necessary.

Use conversion tables you were supplied in notes or separately. Some two-step conversions may be necessary (depending on your table of conversions)

1. Convert the following:

a) 750 mL to L

d) 5 ImpGal to L

b) 0.35 kg to g

e) 66 531 ft to miles

c) 77 in to cm

f) 3 yd 2 in to in

2. Convert each of the following:

a) 1.5 miles into feet

c) 21 545 mm into m

b) 3.1 km into m

d) 450" into yards

3. Convert each of the following:

a) 2.2 km into miles

c) 25 lbs into kg

b) 56 feet into metres

d) 41" into cm

4. A newborn baby boy weighs **3.5 kg**. What is his mass in **pounds and ounces**? Explain how you can use mental math to determine if your answer is reasonable.

5. The summit of Mount Everest is 8,840 m elevation above sea level.



a. How many miles is this?

b. How many feet?

6. The owner's manual for a car states that the oil should be changed every 8,000 km. How many miles is that? Try some mental math to determine if your answer is reasonable.



7. **Bonus:** You are listening to an American radio station on your way to Fargo, ND for a recreational math conference (some people do math for fun!). The announcer states that the temperature in Fargo is 18°F . What is this temperature in Celsius [$^{\circ}\text{C}$]?