Conversion Review and Practice Name:_____

1. Convert 20 inches into centimetres

$\frac{1 \text{ inch}}{2.54 \text{ cm}} = \frac{20 \text{ inches}}{x \text{ cm}}$ 50.8cm

2. Covert 5 feet, 6 inches into metres

5 ft, 6 inches $6 \div 12 = 0.5$

$= 5.5$ ft $\frac{1 \text{ ft}}{30.48 \text{ cm}} = \frac{5.5 \text{ ft}}{x \text{ cm}}$ 167.64cm

$= 1.68$ m

3. Convert 500 kilometres into miles

$\frac{1 \text{ mile}}{1.609 \text{ km}} = \frac{x \text{ miles}}{500 \text{ km}}$ 310.75 miles

4. Convert 254 centimetres into inches

$\frac{1 \text{ inch}}{2.54 \text{ cm}} = \frac{x \text{ inch}}{254 \text{ cm}}$ 100 inches

5. Convert 5 and a half inches into centimetres

$\frac{1 \text{ inch}}{2.54 \text{ cm}} = \frac{5.5 \text{ inch}}{x \text{ cm}}$ 13.97cm

6. CHALLENGE: In the US fuel economy is measured in miles per gallon, how many miles a car can go on one gallon of gas. In Canada fuel economy is measured in litres per 100 km, how many litres of gas it takes to drive 100 kilometres.

   1. In which system does a lower number represent better fuel economy?

Canadian

   2. In both countries there is a tax on "gas guzzlers" in the US the tax affects vehicles which get less than 22.5 miles per gallon. In Canada the tax takes effect on vehicles which get more than 13 litres per 100 km. Which tax affects more vehicles? US Tax does

22.5 miles per gallon = 35.398 Km per gallon

$\frac{1 \text{ mi}}{1.609 \text{ km}} = \frac{22.5 \text{ miles}}{x \text{ km}} \quad \frac{35.398 \text{ km}}{1 \text{ Gallon}} = \frac{100 \text{ km}}{x}$ 2.825 gallons per 100km

$\frac{1 \text{ L}}{0.26 \text{ gallons}} = \frac{x \text{ L}}{2.825 \text{ gallons}}$ 10.87L per 100 Km