

Name:

### 1.7 Classwork: Unit conversion

1 inch = 2.54 centimeters	1 pound = 16 ounces	1 quart = 2 pints
1 meter = 39.37 inches	1 pound = 0.454 kilogram	1 gallon = 4 quarts
1 mile = 5280 feet	1 kilogram = 2.2 pounds	1 gallon = 3.785 liters
1 mile = 1760 yards	1 ton = 2000 pounds	1 liter = 0.264 gallon
1 mile = 1.609 kilometers	1 cup = 8 fluid ounces	1 liter = 1000 cubic centime- ters
1 kilometer = 0.62 mile	1 pint = 2 cups	

1. Use the table above to answer this question, How many...

(a) centimeters in an inch

(c) gallons in 1 liter

(b) feet in a mile

(d) pounds in a kilogram

2. Use your personal knowledge to answer, How many...

(a) years in a century

(b) hours in a day

3. Multiply by the appropriate conversion factor (fraction) to calculate the equivalent measure. Show work, including units in numerator and denominator.

Example: Convert  $T = 72$  hours to days.

$$T = 72 \text{ hours} \times \frac{1 \text{ day}}{24 \text{ hours}} = 3 \text{ days}$$

(a) Find the length in feet of a board with  $L = 48$  inches.

(b) Find the distance in miles of a race with  $D = 10$  kilometers.

(c) Find the volume in gallons of a tank with  $V = 10$  liters.