



Name:

Class:

Date:

Mathematics

Measurements: Length, Mass, Capacity & Time

Length

Metric

1 cm = 10 mm

1 m = 100 cm = 1000 mm

1 km = 1000 m

1 mi. = 8 furlongs (5280 ft.)

Imperial

1 ft. = 12 inches

1 yd. = 3 ft.

1 furlong = 220 yds.

Mixed

1 inch = 2.54 cm

1 ft. = 30 cm

1 mi. = 1.6 km



Mass

Metric

1 g = 1000 mg

1 kg = 1000 g

1 t = 1000 kg

Imperial

1 lbs. = 16 oz.

1 cwt. = 100 lbs.

1 t = 200 cwt. (2240 lbs.)

Mixed

1 oz. = 25 g

1 kg = 2.2 lbs.



Capacity

Metric

1 ml = 1 cm³

1 l = 1000 ml (or cm³)

1 m³ = 1000 l

1 gal. = 4 quarts

Imperial

1 cup = 8 fl. oz.

1 pint = 2 cups or 16 fl. oz.

1 quart = 2 pints

Mixed

1 fl. oz. = 28.4 ml or cm³

1 cup = 250 ml

1 gal. = 4.55 l



Instructions: Convert into the units provided in brackets. Use the tables provided above. If any decimals, **round to two (2) decimal places**.

- | | | | |
|-----------------------|------------|------------------------------|-----------------------|
| 1.) (a) 16.5 m = | <i>cm</i> | (b) 1.3 quarts = | <i>fl. oz.</i> |
| 2.) (a) 2 t = | <i>mg</i> | (b) 6.8 m ³ = | <i>cm³</i> |
| 3.) (a) 3.4 furlong = | <i>ft.</i> | (b) 20.6 cwt. = | <i>oz.</i> |
| 4.) (a) 35.4 ml = | <i>l</i> | (b) 2.25 cups = | <i>gal.</i> |
| 5.) (a) 12 460 ft. = | <i>mi.</i> | (b) 13,500 g = | <i>kg</i> |
| 6.) (a) 4.3 oz. = | <i>g</i> | (b) 3.75 cups = | <i>ml</i> |
| 7.) (a) 6 lbs. = | <i>kg</i> | (b) 10 800 cm ³ = | <i>cups</i> |

8.) A tree cutter made 26 planks from a cedar tree. If each wooden plank was of length 30 ft, what is the total length of planks, in yards, was made from the tree? *yds.*

9.) Mom made a drink for four (4) dozen adult family members that amounted to 5.6 gallons at a gathering. How much drink would each person receive in litres? *l*

How much fluid ounces of drink did she make? *oz.*

10.) 200 cyclists gathered for a 27 km marathon road race. How much miles would they cover? *mi.*

A cyclist punctured both his tyres at once 11.5 miles in the race. How much metres remaining in the race for him? *m.*

11.) A weightlifter was training using 1.3 hundredweight (cwt.). He added 2.1 cwt, but found it to be too heavy. He took off 1 ½ cwt. How much pounds remain for him to train with? *lbs.*

12.) How many seconds are there in a fortnight? *s.*

A large collection of various mechanical and electrical measuring instruments, including pressure gauges, thermometers, multimeters, and calipers, arranged in a grid-like fashion. The instruments are diverse in shape and size, representing a wide range of measurement capabilities.