

5/16/2016 Introduction into Measuring - worksheet Name: Solutions

1. The organizers of a marathon wish to place markers at intervals of two miles to show the runners how far they have gone. Each marker will be in both miles and kilometres. Using 1 mile = 1.6km (1 d.p.), complete the table below

Miles	Km (to 1 d.p.)	Miles	Km (to 1 d.p.)
0	0.0	10	16.0
2	3.2	12	19.2
4	6.4	18	28.8

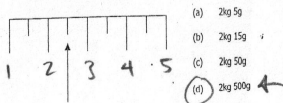
2. Measure these lines in mm then convert your answers to cm:

(a) $29.1 \text{ mm} = 2.91 \text{ cm}$

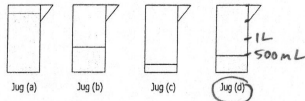
(b) $12.7 \text{ mm} = 1.27 \text{ cm}$
 $30.5 \text{ mm} = 3.05 \text{ cm}$

(c) $7.2 \text{ mm} = 0.72 \text{ cm}$
 (d) $35.4 \text{ mm} = 3.54 \text{ cm}$

3. The scale below measures weights from 1kg to 5kg. What weight is the arrow pointing at?



4. The diagram shows four 2 litre jugs with coffee in them. Which one contains 500ml?



5. A different jug holds 1litre when full, how many millilitres will it hold when it is three-quarters full?

- (a) 25ml (b) 250ml (c) 750ml (d) 75ml

6. How much liquid could 3/5 of the jugs from Q4 hold?

- (a) 350 litres (b) 350ml (c) 3.5 litres (d) 35ml

Solutions

METRIC SYSTEM WORK SHEET

1 km = 1000000 mm	0.0102 mm = 0.0000102 m
1 m = 100 cm	9.7 cm = 97 mm
1 cm = 10 mm	16 cm = 0.16 m
1 km = 1000 m	47 km = 47000 m
1m = 1000 mm	4.15 mm = 0.00415 m
1 km = 100000 cm	0.0042 km = 420 cm
16 m = 16000 mm	68.3 mm = 0.0000683 km
18.7 cm = 0.000187 km	0.014 km = 0.0014 cm
0.006 km = 6000 mm	313 m = 313000 mm
912.65 cm = 9126.5 mm	3 000 cm = 30 m
194.3 m = 0.1943 km	29.1 cm = 0.000291 km
16.58 km = 16580000 mm	0.00087 mm = 0.000087 cm
1 cm ² = 100 mm ²	1 421 cm ² = 0.01421 km ²
1 m ² = 10000 cm ²	38.4 mm ² = 0.0000384 m ²
1 km ² = 10000000000 cm ²	15.6 m ² = 156000 cm ²
1 mm ² = 0.000001 m ²	0.0047 km ² = 4700000000 mm ²
1 cm ² = 0.0001 m ²	16.1 mm ² = 0.161 cm ²
2.4 m ² = 2400000 mm ²	3.4 x 10 ⁴ mm ² = 0.034 m ²
1 L = 1000 mL	1 mm ³ = 0.001 cm ³
15 mL = 15 cm ³	78 cm ³ = 0.078 L
3.3 L = 3300 mL	1 451 mL = 1.451 L
44.5 mL = 0.0445 L	22.3 mm ³ = 0.0000223 cm ³
167.3 cm ³ = 0.1673 L	1.56 x 10 ⁴ cm ³ = 0.0156 m ³
1 m ³ = 1000 000 cm ³	15600 0.0086 m ³ = 8600000 mm ³
1 kg = 1000 g	34.8 g = 0.0348 kg
1 631 g = 1.631 kg	0.0065 g = 6.5 mg
14 300 g = 0.014300 t	0.0053 kg = 0.0000053 t
25 450 kg = 25450 000 g	78.3 mg = 0.0000783 kg
6.8 x 10 ⁵ mg = 0.00068 t	2.61 t = 2610 000 g
680000	