

MEASURES PROBLEMS 1

90

TARGET To solve word problems involving the conversion of measures between different units.

Example

Each load of washing uses 100 g of powder. How many loads can be washed from a 2.5 kg box?

$$2.5 \text{ kg} = 2500 \text{ g}$$

$$2500 \div 100 = 25$$

Answer: 25 loads can be washed.

A

- 1 A packet of cornflakes weighs one kilogram. 200 g is used. How much is left?
- 2 One lap of a running track is 400 m. How far is ten laps in kilometres?
- 3 There are three litres of water in a watering can. 540 ml is added. How much water is there in the can now?
- 4 Each parcel weighs 500 g. What is the weight of four parcels in kilograms?



- 5 Large pins are 3.5 cm long. Small pins are 15 mm shorter. How long are small pins?
- 6 Elsa buys a litre bottle of milk. She drinks half of the milk. How much is left in millilitres?

B

- 1 A door is 1.9 m tall. There is 76 cm from the top of the door to the ceiling. What is the height of the room?
- 2 A pile of 60 magazines weighs 10.8 kg. What does each magazine weigh in grams?
- 3 A tub of ice cream holds 2 litres. 350 ml is used. How much ice cream is left?
- 4 The fence round a square field is one kilometre long. What is the length of one side of the field in metres?

- 5 A pie weighs 1.5 kg. A larger pie weighs 735 g more. What is the weight of the larger pie?

- 6 Each tube of paint holds 40 ml. How much paint is needed to fill ninety tubes?

C

- 1 Twelve cartons of a drink hold a total of 2.7 litres. What does one carton hold in millilitres?
- 2 Myra buys 0.72 kg of mince. She uses 275 g. How much mince does she have left?
- 3 Each sheet of card is 1.5 mm thick. There are 50 sheets in a pack. How thick is a pack in centimetres?
- 4 A can of cycle oil holds 0.12 litres. 55 ml is used. How much oil is left?
- 5 Eight identical jars of sauce hold 2.8 kg of sauce. How much sauce is there in one jar in grams?
- 6 Gareth walks 765 m to the canal and 5.68 km along the towpath. How far does he walk altogether?



MEASURES PROBLEMS 2

91

TARGET To solve 1-step and 2-step problems involving the conversion of measures between different units.

Example

A bottle contains half a litre of spray cleaner. 200 ml is used. Half of the rest is used. How much is left?

Answer: 150 ml is left.

$$\frac{1}{2} \text{ litre} = 500 \text{ ml}$$

$$500 \text{ ml} - 200 \text{ ml} = 300 \text{ ml}$$

$$300 \text{ ml} \div 2 = 150 \text{ ml}$$



A

- 1 Jill throws the ball 28 m. Rae throws it 15 m further. What is the length of Rae's throw?
- 2 A bag of nuts weighs 100 g. 60 g is eaten. How much is left?
- 3 Ian buys four pencils for £1. How much does each pencil cost?
- 4 A dishwasher uses 40 litres of water each wash. How much water does it use in five washes?



- 5 Josh has three 20p coins and three 10p coins. How much does he have altogether?
- 6 A piece of wood is 60 cm long. 10 cm is cut off. The rest of the wood is cut in half. How long are the two equal pieces?

B

- 1 One can of fish weighs 200 g. What do six cans weigh in kilograms?
- 2 Tiles are 20 cm long. How many are needed to make a row 4 m long?
- 3 Ricky buys two bottles of water, each holding 650 ml. He drinks half a litre. How much water does he have left?
- 4 A pie weighs 1 kg. It is cut into five equal slices. One is eaten. How much is left in grams?
- 5 Susan's daily paper costs 55p. Her Sunday paper costs £1.50. How much does she pay for her papers each week?

- 6 A drink is made with 1.2 litres of water and 300 ml of juice. It is then poured equally into 10 glasses. How much drink is in each glass?

C

- 1 A shower uses 6 litres of water in one minute. How much water does it use in one second?
- 2 A plank is 4 m long. Three 40 cm lengths are cut off. A further 75 cm is cut off. How long is the plank that is left?
- 3 A bath holds 38.7 litres of hot water and 11.6 litres of cold water. 800 ml evaporates. How much water is left in the bath?
- 4 One gravy cube weighs 6 g. What do 250 cubes weigh in kilograms?
- 5 An athlete runs 3.6 km to warm up, then a fast 800 m and 1.5 km to warm down. How far does she run altogether?

- 6 CDs cost £6.75. Lynne buys three for the price of two. How much has each CD cost her?