# Level 2 Measure Ouestions

### Level 2 Adult Numeracy questions: common measures.

You will need a ruler marked in mm and cm. Allow about 25 minutes.

You may NOT use a calculator. Bilingual dictionaries may be used.

Metric and imperial measures, estimation, currency, conversions, read scales.

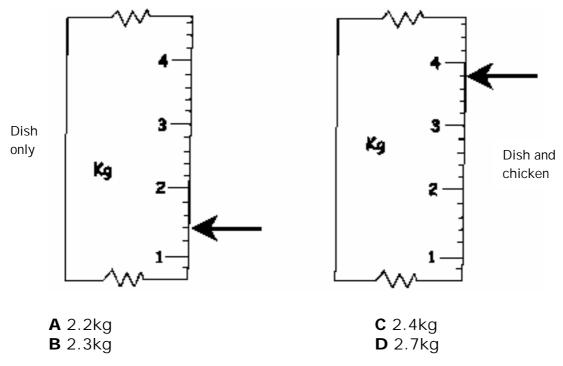
MSS1/L2.1 calculate with money, convert currencies. MSS1/L2.2 calculate and measure time. MSS1/L2.3 estimate, measure and compare length, distance, weight and capacity using metric and, where appropriate, imperial units (a) know the metric units of length, distance, weight, capacity (b) know common imperial units of length, distance, weight, capacity, where appropriate (c) read scales to different levels of accuracy, including reading between marked divisions.

MSS1/L2.5 calculate with units of measure within the same system.

MSS1/L2.6 calculate with units of measure between systems, using conversion tables and scales, and approximate conversion factors.

1. Caroline wants to know the weight of a chicken so that she can work out how long to cook it.

First she puts a dish on the scales and records the weight of the dish. Then she weighs the dish with the chicken in it. How heavy is the chicken?



**2.** This is the label on a packet of weed killer to treat a garden.

#### **WEEDKILLER**

Mix 60 grams of powder with 4.5 litres of water To treat 20 square metres of ground 1 litre of water weighs 1000 g (1 kg)

For best results, the diluted weed killer mix should be spread evenly over the ground. Approximately how much diluted weed killer is needed per square metre of ground?

A 0.2 litres

**B** 3 litres

C 9 litres

**D** 225 litres



C 3 hours

**3.** Mark is cooking a 3 kilogram joint of beef. His cook book says that:

Cooking time in minutes = 
$$\frac{105 \times \text{weight in kilograms}}{2} + 25$$

How long must he cook the beef for (to the nearest 10 minutes)?

A 2 hours 30 minutes

**B** 2 hours 50 minutes **D** 3 hours 10 minutes

**4.** Margaret is checking that tennis balls manufactured by her company meet the UK specification.

### SPECIFICATION FOR TENNIS BALLS

**diameter:** 2.500–2.625 inches **weight:** 2.000–2.063 ounces

rebound height: 53–58 inches when dropped from a height of 100 inches

Margaret converts the measurements to metric units, so that she can also check against international standards. She uses the conversion number of millimetres = number of inches x 25.4

What is the minimum diameter of the ball in millimetres?

What is the minimum diameter of the ball in millimetres?

**A** 62.07 mm **C** 62.9 mm **B** 62.5 mm **D** 63.5 mm

**5.** All needs an 18-inch zip to replace a broken one in a cushion. The shop only sells them in centimetres.

Which zip is the closest to the one Ali needs given that 1 inch is approximately equal to 2.5cm?

**A** 7cm **C** 45cm **B** 36cm **D** 54cm

**6.** The instructions on the bottle of orange squash state 'mix one part squash with four parts water.'

How much squash is used to make 3 litres of orange drink?

**A** 60ml **C** 600ml **B** 75ml **D** 750ml

**7.** The tank of the car holds 12 gallons of petrol.

There are 4.55 litres in one gallon.

How many litres does the tank hold, to the nearest litre?



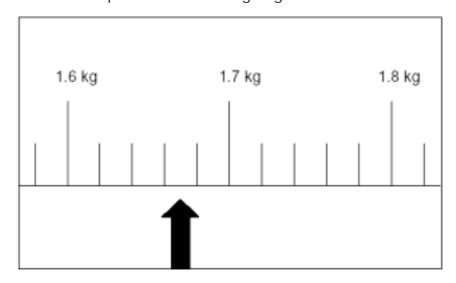
A 2 litres

**C** 52 litres

**B** 3 litres

**D** 55 litres

**8.** Andy bags some fruit in a supermarket and weighs it in the bag. The picture shows the pointer on the weighing scales.



Andy knows the bag weighs about 4 grams.

What is the best estimate for the weight of the fruit in his bag?

**A** 1.631 kg

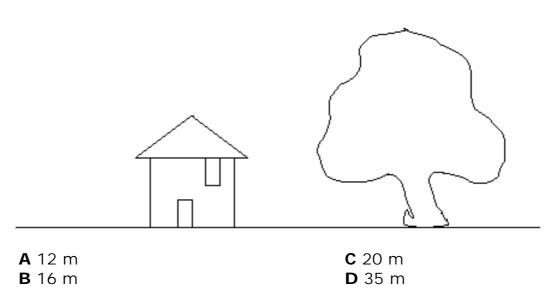
**C** 1.666 kg

**B** 1.661 kg **D** 1.681 kg

**9.** Mary is concerned about the growth of a large tree near her house. She photographs the house and tree from a point some way away and an equal distance from them both.

The picture shows part of her photograph.

Her house is 9.1 metres high. Estimate the height of the tree.



**10**. A carton contains 0.45kg oats. A normal serving is 30g. How many servings can be obtained from the carton?

**A** 15 **B** 3

**C** 150

**D** 30

**Practice measure questions for Level 2 numeracy.** Most questions are copied from past papers (with permission from QCA), a few are made up or have been slightly altered.

**11.** The Tide Table is for Little Creek Harbour over a period of 4 days. Boat users

Tide Table								
Date	Time	Depth of water						
		(metres)						
24.3.01	0219	0.5 L						
	0905	4.1 H						
	1437	0.7 L						
	2117	3.9 H						
25.3.01	0247	0.8 L						
	0929	3.8 H						
	1502	1.0 L						
	2142	3.6 H						
26.3.01	0313	1.1 L						
	0958	3.5 H						
	1525	1.3 L						
	2212	3.4 H						
27.3.01	0340	1.4 L						
	1034	3.2 H						
	1553	1.5 L						
	2253	3.1 H						

refer to the table to make sure they can bring their boats in and out of the harbour safely.

The depth of water in the harbour changes all the time, as the tide comes in and goes out. The table shows the times of High Water, H (when the water in the harbour is deepest) – and Low Water, L (when the water in the harbour is shallowest).

The tide depths are given to the nearest 0.1 metres. This means that the exact tide depths are no more than

A 5 mm from the depths in the table

**B** 10 mm from the depths in the table

**C** 5 cm from the depths in the table

**D** 10 cm from the depths in the table

## Questions 12 and 13 are about a man travelling.

A man travels from Switzerland to France. The journey takes two and a half hours to travel 160km.

**12.** How far is the journey in miles? (Take 8km to be the same as 5 miles)



**A** 80 miles **C** 160 miles **B** 100 miles **D** 256 miles

**13.** The average speed for the 160km journey is

A 50 kilometres per hourB 64 kilometres per hourC 160 kilometres per hourD 400 kilometres per hour

**14.** A man spends 42 Euros in a shop. £1 is approximately 1.4 Euros. The amount he spends in the shop is about

**A** £3 **C** £30 **B** £28 **D** £59

#### **Answers**

1	2	3	4	5	6	7	
8	9	10	11	12	13	14	Total

#### **Tutor Comments**

## Answer sheet

## **Level 2 Measure questions**

1 C(2.4kq)A (0.2 litres) 3 C (3 hrs) D (63.5mm) 5 C (45cm) 6 C (600ml) 7 D (55 litres) 8 C (1.666kg) 9 B (16m)

10 – A (15 servings)

11 – C (5cm)

12 – B (100 miles)

13 – B (64 km per hour)

14 – C (£30)

### Allow about 25 minutes.

### **Printing notes**

Although PDF files provide accurate print outs of what is on screen small discrepancies can occur which may affect the sizes of scale drawings.

### Note particularly:

Question 9. On paper the tree should be roughly  $1\frac{2}{3}$  size of the house (i.e. house approx 3cm high, tree approx 5cm).