

# MASS

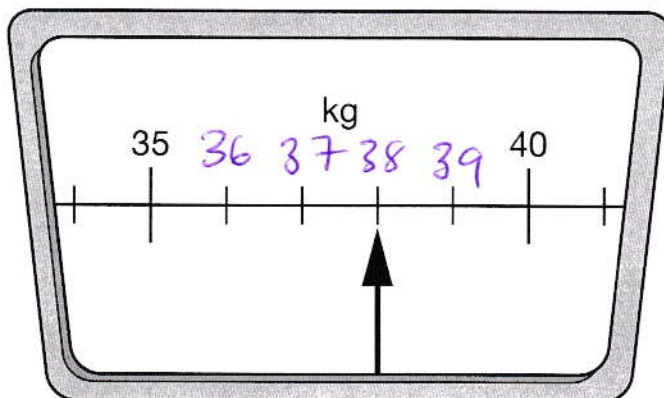
CONTENT DOMAIN REFERENCES:  
M1, M2, M5, M9

# KS2 SATS

## PRACTICE QUESTIONS BY TOPIC

**1** This scale shows how much Chen weighs.

[2014]



How much does Chen weigh?

 **38 kg**

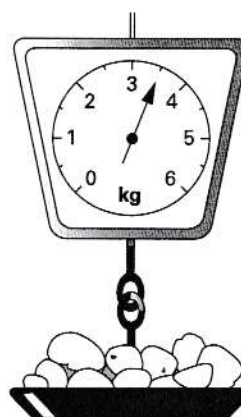
[1 mark]

**2** This table shows the weight of some fruits and vegetables.

[2002]

Complete the table.

	grams	kilograms
potatoes	3500	3.5
apples	1200	1.2
grapes	250	0.25
ginger	30	0.03



[2 marks]

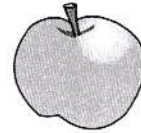
3 Which value completes each sentence? Tick (✓) the correct box.

[Extra]

The **weight** of an **apple** is about ...



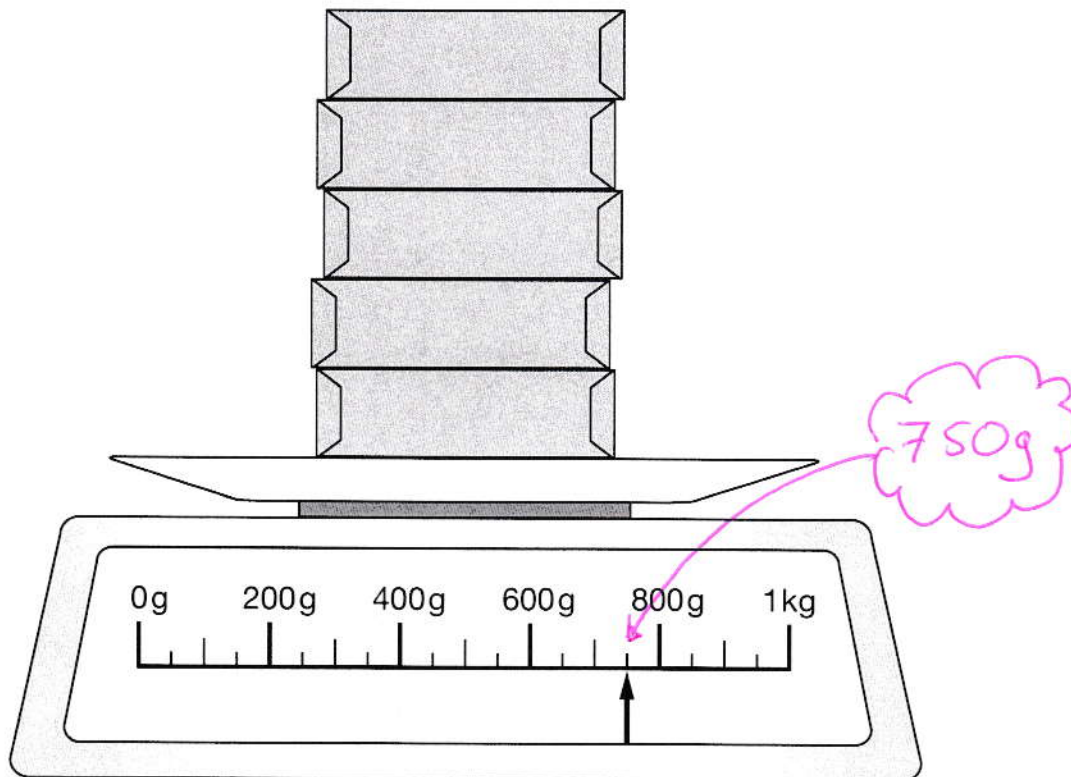
- 1 gram
- 10 grams
- 100 grams
- 1000 grams



[1 mark]

4 Look at the diagram.

[Extra]



The scale shows how much five parcels weigh.

All the parcels weigh the same.

How much does one parcel weigh?

$$\begin{array}{r} 150 \\ 5 \overline{) 750} \end{array}$$

150 g

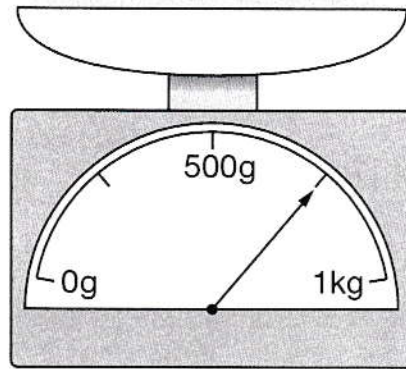
[1 mark]

5

Raj is making a cake.

[Extra]

The scales show how much flour he uses.



How much flour does Raj use?

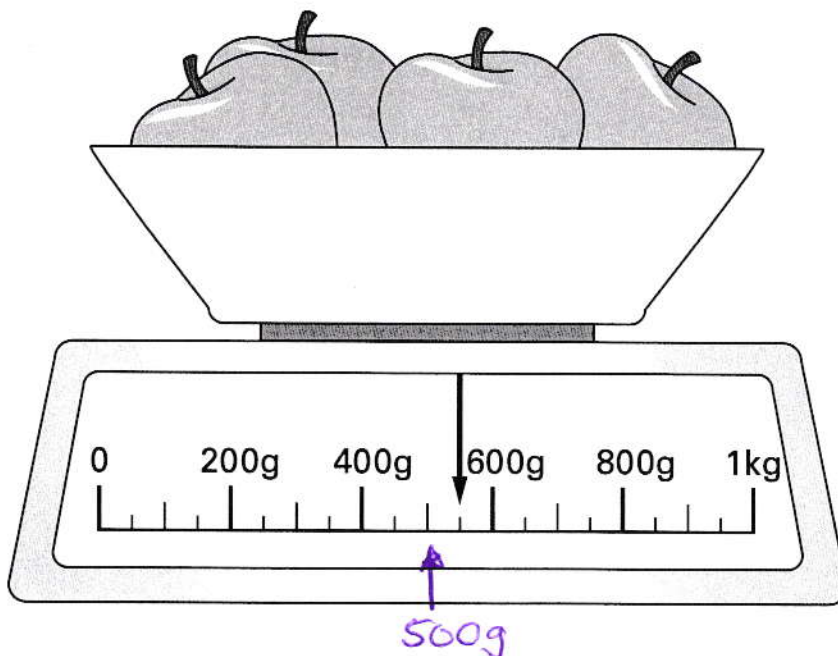
750 g

[1 mark]

6

Here are some apples.

[Extra]



What is the total weight of these apples?

550 g

[1 mark]

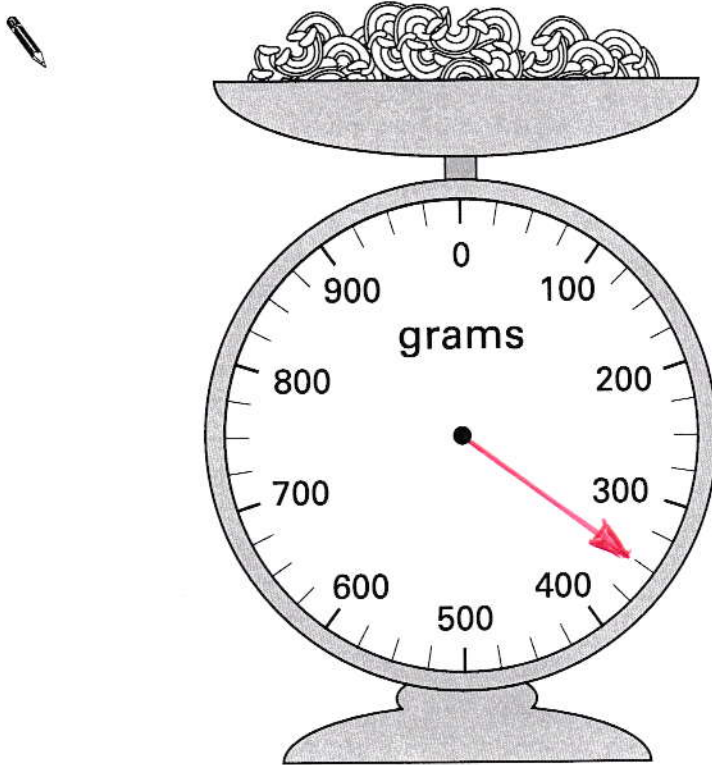
7

Jamie is cooking pasta.

[2003]

He weighs 350 grams of pasta.

Draw an arrow on the scale to show 350 grams.



[1 mark]

8

About how much does a new-born baby weigh?

[Extra]

Tick (✓) the correct answer.

- 0.3 kg
- 3 kg
- 30 kg
- 300 kg



[1 mark]

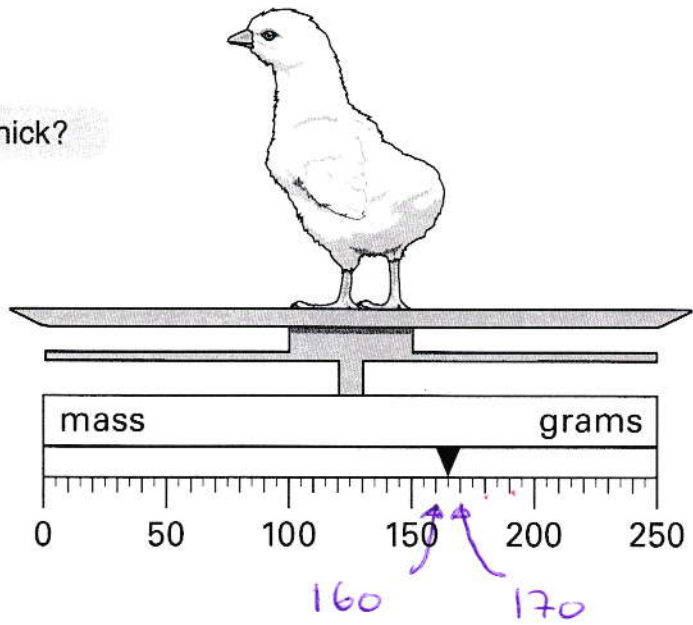
9

Look at the scales.

[Extra]

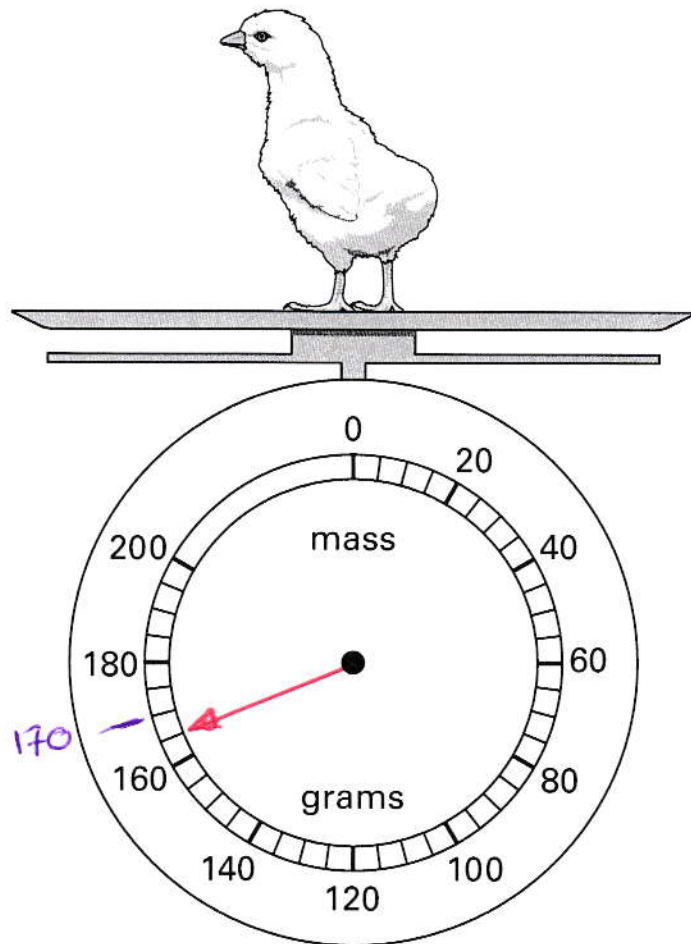
What is the mass of the chick?

165 g



The diagram below shows the same chick on different scales.

Draw an arrow to show the mass of the chick.



[2 marks]

10

Here are four masses.

[2011]

2 kilograms

1 tonne

800 grams

$\frac{1}{2}$  kilogram

Write the masses in order, starting with the lightest.



$\frac{1}{2}$  kilogram

lightest

800 grams

2 kilograms

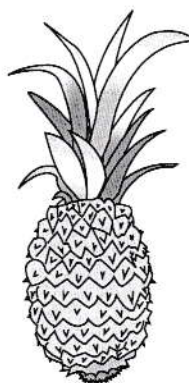
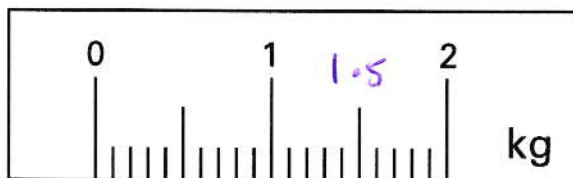
1 tonne

[2 marks]

11

On this scale, the arrow ( $\uparrow$ ) shows the weight of this pineapple.

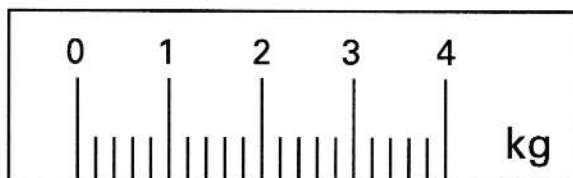
[2001]



1.4

Here is a **different** scale.

Mark with an arrow ( $\uparrow$ ) the weight of the **same** pineapple.

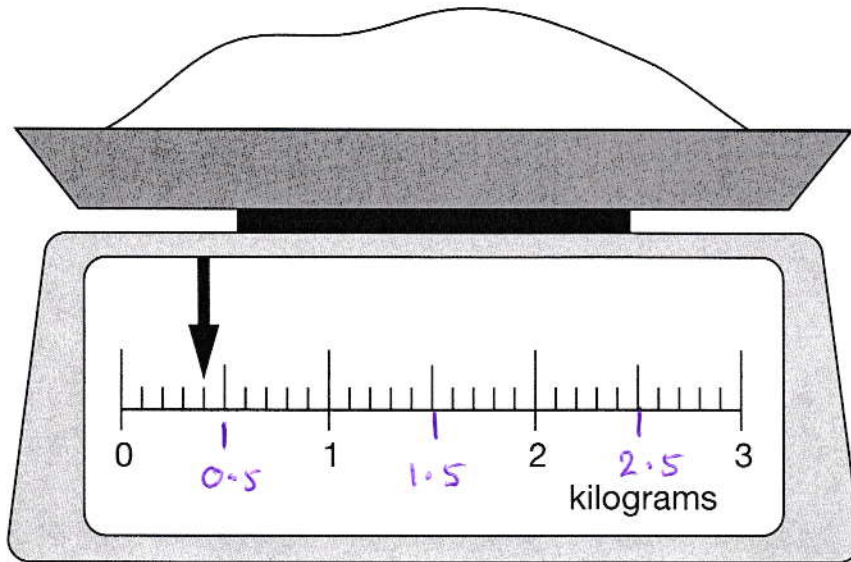


[1 mark]

**12**

Here is some flour on a weighing scale.

[2006]



How many grams of flour are on the scale?

0.4 kg

400 g

How much more flour must be added to the scale to make 1.6 kg?

1600 - 400

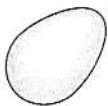
1200 g [1.2 kg]

[2 marks]

**13**

Circle one amount to make the sentence correct.

[Extra]



A hen's egg is likely to weigh about



6 g
60 g
600 g

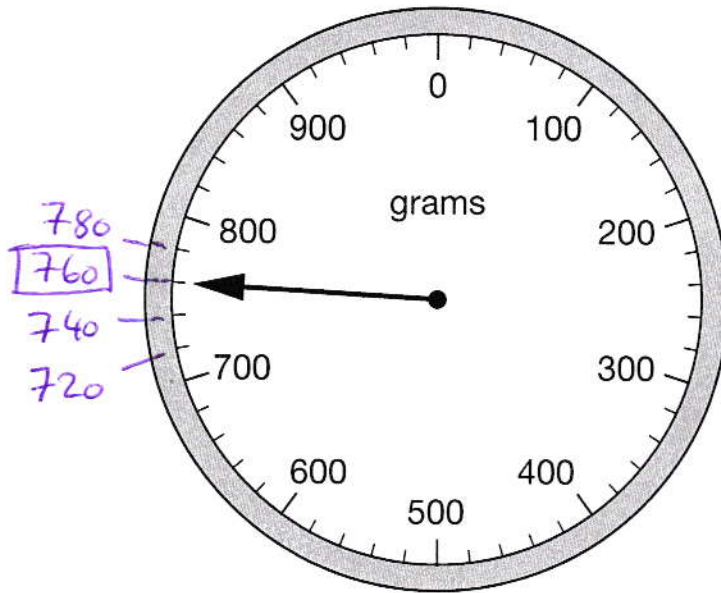
[1 mark]

14

Joe places some apples on a weighing scale.

[2011]

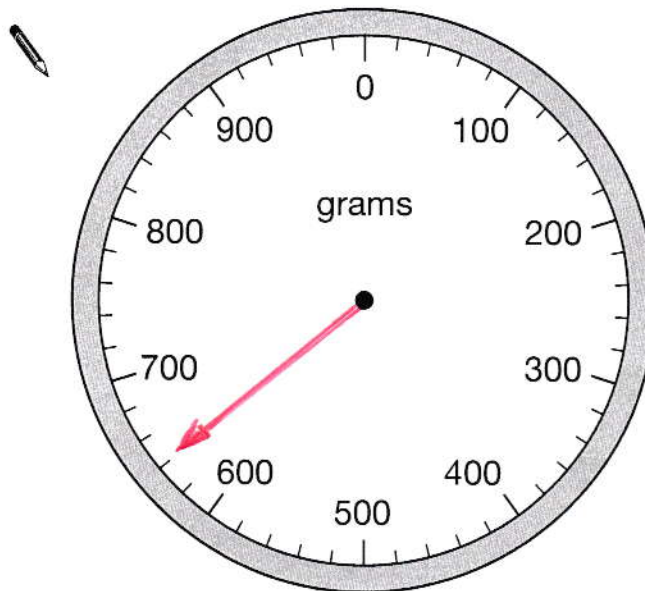
The pointer shows the mass of the apples.



He takes away one apple.

The mass goes down by 120 grams.

Draw the pointer in its new position on the scale below.

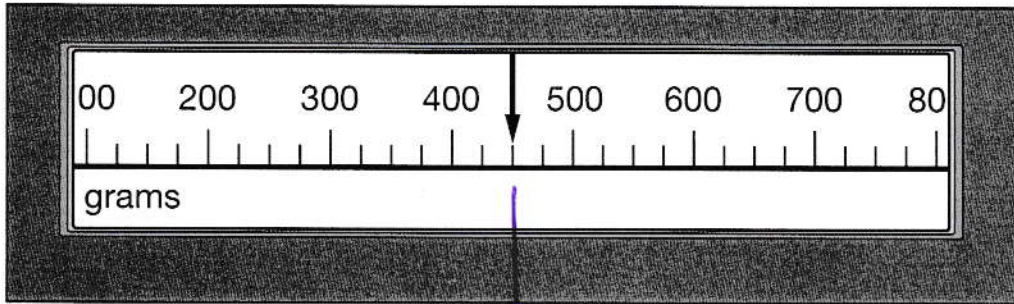
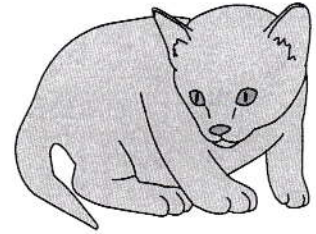


$$\begin{array}{r} 760 \\ - 120 \\ \hline \underline{\underline{640}} \end{array}$$

[1 mark]

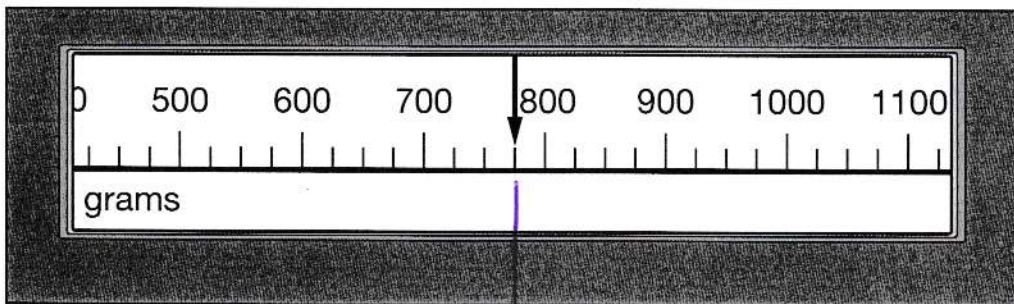


This scale shows the mass of Amy's kitten when it was one month old.



450g

This scale shows the mass of the kitten when it was two months old.



775g

What is the increase in mass?

$$\begin{array}{r} 775 \\ - 450 \\ \hline 325 \end{array}$$



325 g

[1 mark]

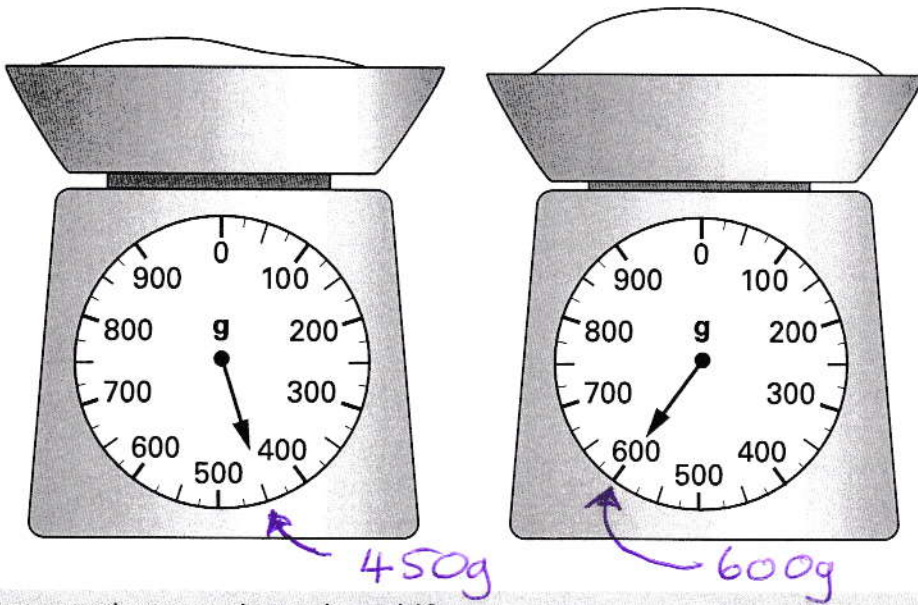
16

Emily is making a cake.

[Extra]

She puts flour on the scales.

She then adds sugar to the flour.



How much sugar does she add?

Show your method

$$\begin{array}{r} 600 \\ - 450 \\ \hline 150 \end{array}$$

150g

[2 marks]

17

One gram of gold costs £32.94

[2016S]

What is the cost of half a kilogram of gold?

500g

Show your method

$$\begin{aligned} & 500 \times 32.94 \\ & = 5 \times 3294 \\ & = 10 \times 1647 \end{aligned}$$

£16,470

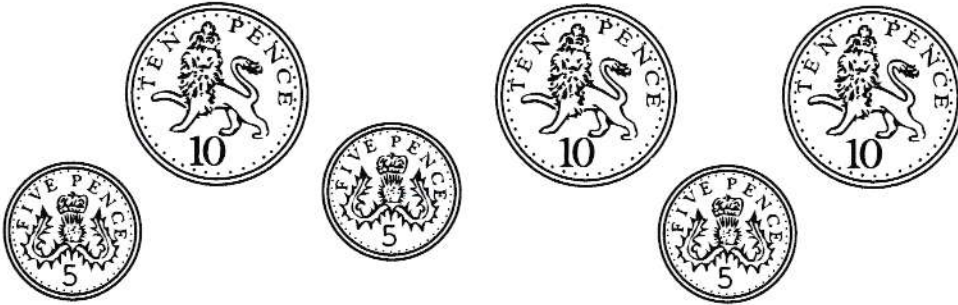
[1 mark]

18

The mass of a 10p is 6.5g

[2016S]

The mass of a 5p coin is half the mass of a 10p coin.

What is the mass of these six coins **altogether**?

Show your method

$$\begin{array}{r} 6.5 \\ \times 3 \\ \hline 19.5 \end{array}$$

$$\begin{array}{r} 3.25 \\ \times 3 \\ \hline 9.75 \end{array}$$

$$\begin{array}{r} 19.50 \\ + 9.75 \\ \hline 29.25 \end{array}$$

29.25g

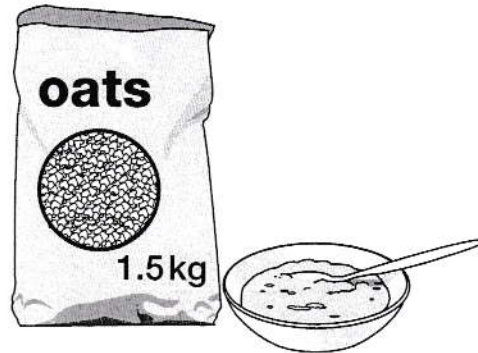
[2 marks]

19

A packet contains 1.5 kg of oats.

[2016]

Every day Maria uses 50 g of oats to make porridge.



How many days does the packet of oats last?

Show your method

$$\begin{array}{r} 50 \overline{) 1500} \\ \underline{030} \\ 5 \overline{) 150} \end{array}$$

30

[2 marks]

20

The table shows some masses written in grams and in kilograms.

[Extra]

Complete the table.

grams	kilograms
2000 g	2 kg
200 g	0.2 kg
3020 g	3.02 kg
2750 g	$2\frac{3}{4}$ kg

[2 marks]

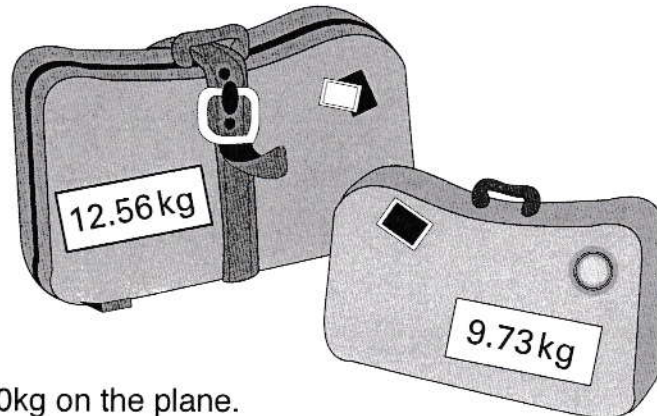
21

Amar packs two suitcases to take on a plane.

[Extra]

One suitcase weighs **12.56kg**

The other weighs **9.73kg**



Amar is only allowed to take 20kg on the plane.

His suitcases are too heavy.

By how much are they too heavy?

Show your method

$$\begin{array}{r}
 12.56 \\
 + 9.73 \\
 \hline
 22.29
 \end{array}
 \quad
 \begin{array}{r}
 22.29 \\
 - 20.00 \\
 \hline
 2.29
 \end{array}$$

2.29 kg

[2 marks]

22

Jack weighs himself.

[Extra]

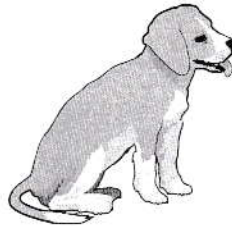


44.8kg

Then Jack weighs himself together with his dog.



and



60.4kg

How much does the dog weigh?

Show your method

$$\begin{array}{r} 5 \cancel{6} 0.4 \\ - 44.8 \\ \hline 15.6 \end{array}$$

15.6kg

[2 marks]

23

Here are four masses.

[Extra]

1.3 kg

1.03 kg

 $1\frac{1}{4}$  kg

1200 g

[1300g]

[1030g]

[1250g]

[1200g]

Write the masses in order, starting with the lightest.

1.03kg

1200g

 $1\frac{1}{4}$ kg

1.3kg

lightest

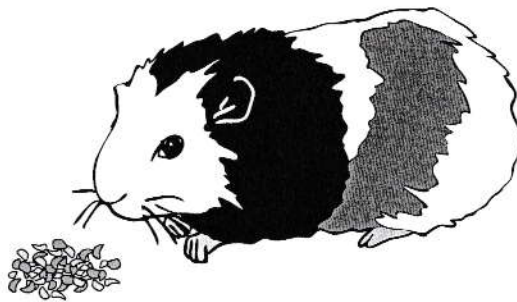
[2 marks]

24

[2003]

A packet contains **1.5 kilograms** of guinea pig food.

Remi feeds her guinea pig **30 grams** of food each day.



How many days does the packet of food last?

Show your method

$$1500 \div 30$$

$$= 150 \div 3$$

$$\begin{array}{r} 050 \\ 3 \overline{)150} \end{array}$$

50

[2 marks]

25

[2013]

Chen and Megan each have a parcel.

Chen's parcel weighs  $1\frac{1}{2}$  kg.  $\rightarrow 1500$  g

Megan's parcel weighs 1.2 kg.  $\rightarrow 1200$  g

How many more **grams** does Chen's parcel weigh than Megan's parcel?

Show your method

$$\begin{array}{r} 1500 \\ - 1200 \\ \hline 300 \end{array}$$

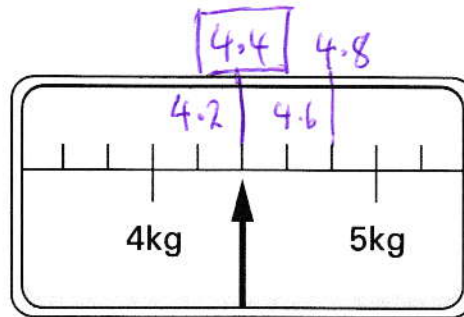
300 g

[2 marks]

This scale shows the weight of Fred's cat.



Fred's cat



What is the weight of Fred's cat?

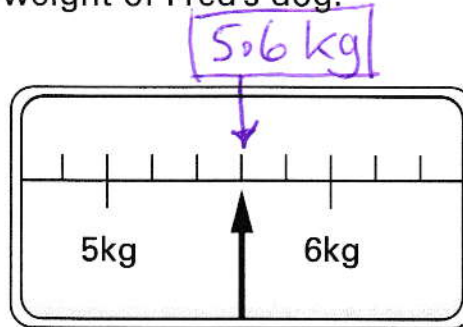


4.4 kg

This scale shows the weight of Fred's dog.



Fred's dog



How much **more** does Fred's dog weigh than his cat?

$$\begin{array}{r} 5.6 \\ - 4.4 \\ \hline \underline{\underline{1.2}} \end{array}$$



1.2 kg

[2 marks]



Cheddar cheese costs £7.50 for 1kg.

Marie buys 200 grams of cheddar cheese.

$\frac{1}{5}$  OF A KILOGRAM

How much does she pay?

$$\frac{1}{5} \times 7.50$$

£ 1.50

Cream cheese costs £3.60 for 1kg.

Robbie buys a pot of cream cheese for 90p.



How many grams of cream cheese does he buy?

Show your method

$$90 \overline{) 360} \rightarrow \frac{1}{4} \text{ OF A KILOGRAM!}$$

$$\begin{array}{r} 04 \\ 9 \overline{) 36} \\ \underline{90} \\ 04 \end{array}$$

250g

[3 marks]