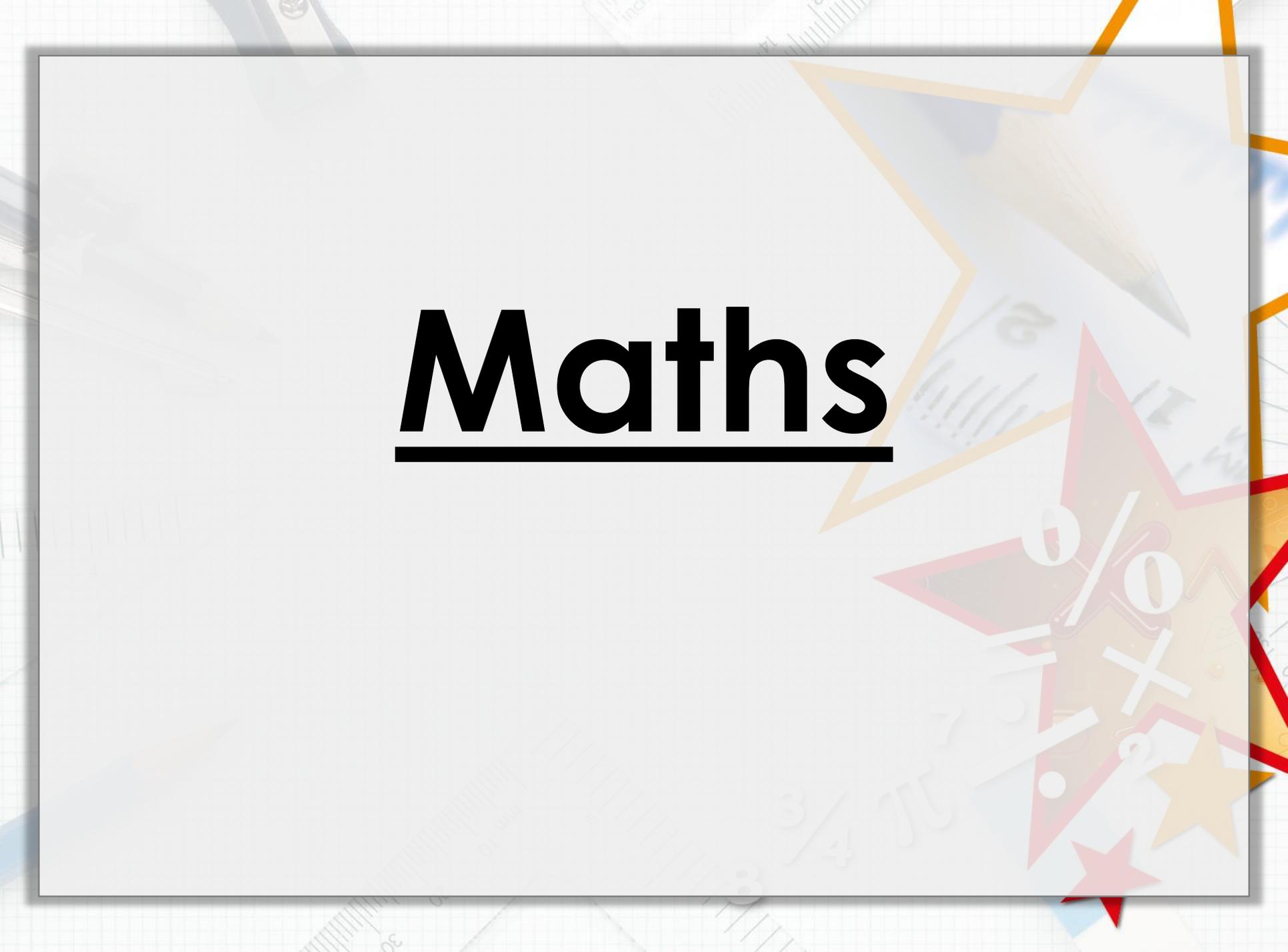


# Maths



# Maths Starter

## Year 5 Spring 2 Maths Activity Mat 1

### Section 1

Order the following numbers from smallest to largest.

2929	2299	2292	2992
------	------	------	------

--	--	--	--

### Section 2

Three classes of children collect some money for Comic Relief. The total collected was £205. Two of the classes collected £76 and £68. How much did the third class collect?

### Section 3

A teacher wants to arrange 32 children into equal groups. Explain how the teacher may do this.

- \_\_\_ groups of \_\_\_ children
- \_\_\_ groups of \_\_\_ child

### Section 4

Convert the improper fractions into mixed fractions.

$$\frac{7}{2} \longrightarrow \square$$
$$\frac{4}{3} \longrightarrow \square$$
$$\frac{9}{5} \longrightarrow \square$$

### Section 5

Write the decimal fraction that is equivalent to the fraction.

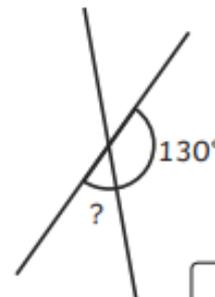
$\frac{1}{2}$	
$\frac{1}{4}$	
$\frac{1}{10}$	

### Section 6

Draw a square with a perimeter of 20cm (not to scale). Write the length of the side.

### Section 7

Calculate the missing angle:



### Section 8

Estimate the weight of a can of coke.



# Maths Answers

## Year 5 Spring 2 Maths Activity Mat 1 **Answers**

### Section 1

Order the following numbers from smallest to largest.

2929	2299	2292	2992
------	------	------	------

2292	2299	2929	2992
------	------	------	------

### Section 2

Three classes of children collect some money for Comic Relief. The total collected was £205. Two of the classes collected £76 and £68. How much did the third class collect?

£61

### Section 3

A teacher wants to arrange 32 children into equal groups. Explain how the teacher may do this.

- 1 groups of 32 children
- 2 groups of 16 children
- 4 groups of 8 children
- 8 groups of 4 children
- 16 groups of 2 children
- 32 groups of 1 child

### Section 4

Convert the improper fractions into mixed fractions.

$$\frac{7}{2} \longrightarrow 3\frac{1}{2}$$

$$\frac{4}{3} \longrightarrow 1\frac{1}{3}$$

$$\frac{9}{5} \longrightarrow 1\frac{4}{5}$$

### Section 5

Write the decimal fraction that is equivalent to the fraction.

$\frac{1}{2}$	0.5
---------------	-----

$\frac{1}{4}$	0.25
---------------	------

$\frac{1}{10}$	0.1
----------------	-----

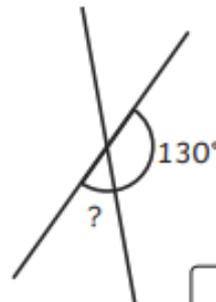
### Section 6

Draw a square with a perimeter of 20cm (not to scale). Write the length of the side.

5cm x 5cm

### Section 7

Calculate the missing angle:



50°

### Section 8

Estimate the weight of a can of coke.

250g-400g

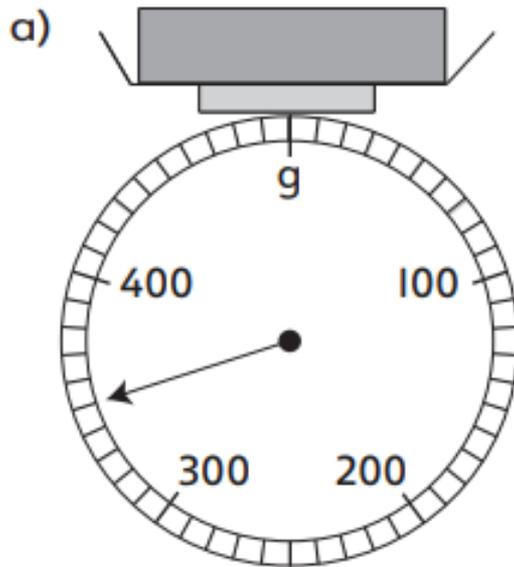
# Lesson Objective

I can read scales using grams and kilograms

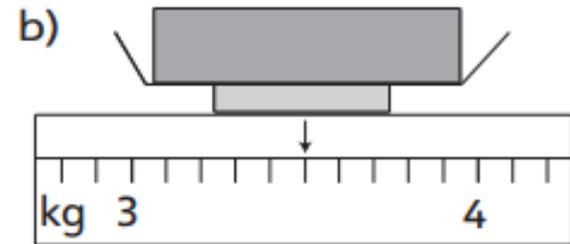
# Start with a problem

II

Give the mass of each of these parcels in kilograms and grams.



kg  
 g



kg  
 g

# Teach

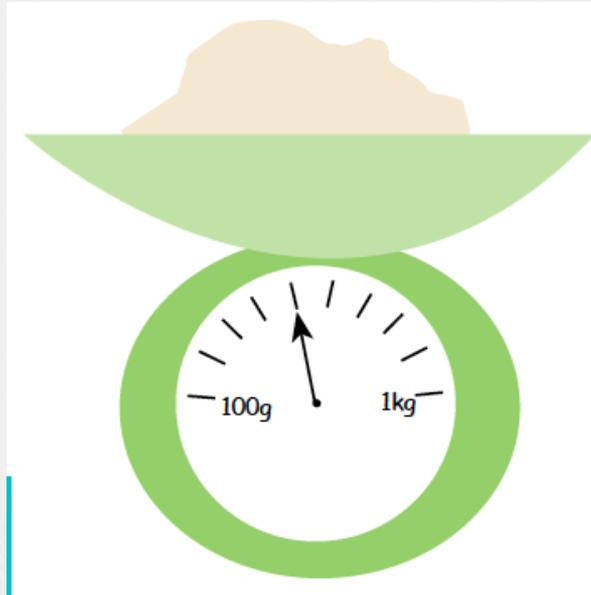
To be able to answer this problem, we need to be able to do some different skills confidently:

- 1) We need to be able to read scales in grams
- 2) We need to be able to read scales in kg
- 3) We need to be able to convert between grams and kilograms.

# Teach

## What is mass?

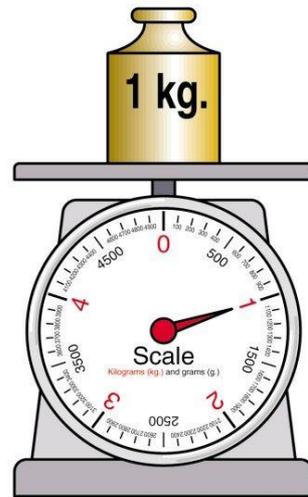
Mass refers to how heavy something is. We weigh things and find out how heavy they are using scales.



# Teach

## What are grams and kilograms?

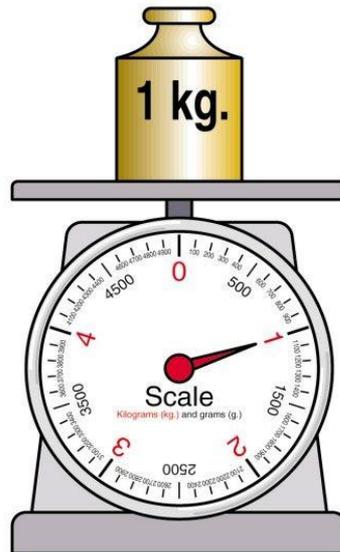
When you have weighed something using the scale, you measure it using grams and kilograms.



1 kilogram = 1000 grams

# Learn

$$1\ 000\text{g} = 1\ \text{kg}$$



1 kilogram = 1000 grams

## Teach

**Measuring mass comes in handy all the time. Whenever you bake or cook, you have to use scales to weigh the ingredients. If you didn't use the correct amount of flour in a cake, it would not taste nice!**

**When measuring mass, you use grams and kilograms.**

$$1000 \text{ g} = 1 \text{ kg}$$

**When you're reading scales, you have to look really carefully at the intervals (divisions) between the numbers. This is so you can identify which numbers they represent.**

**The scales tell you whether you are reading grams or kilograms**

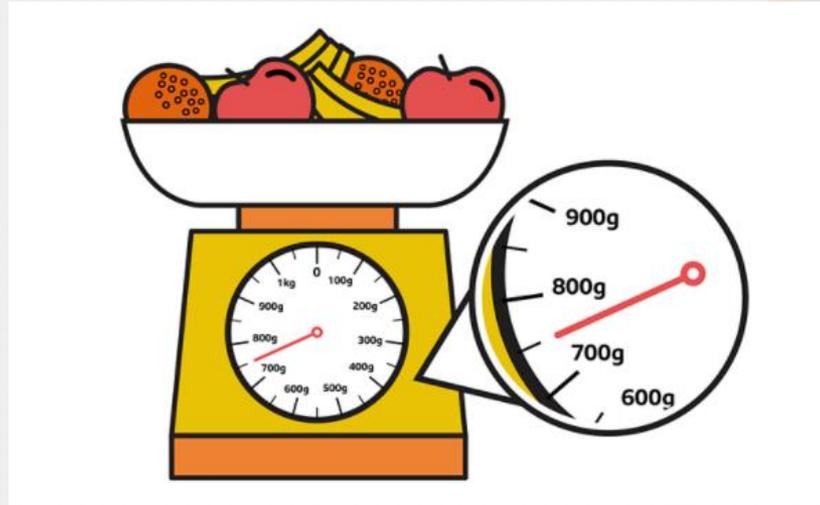
# Video

Watch the video to find out more about mass, grams and kilograms.

<https://www.bbc.co.uk/bitesize/articles/zndy6g8>

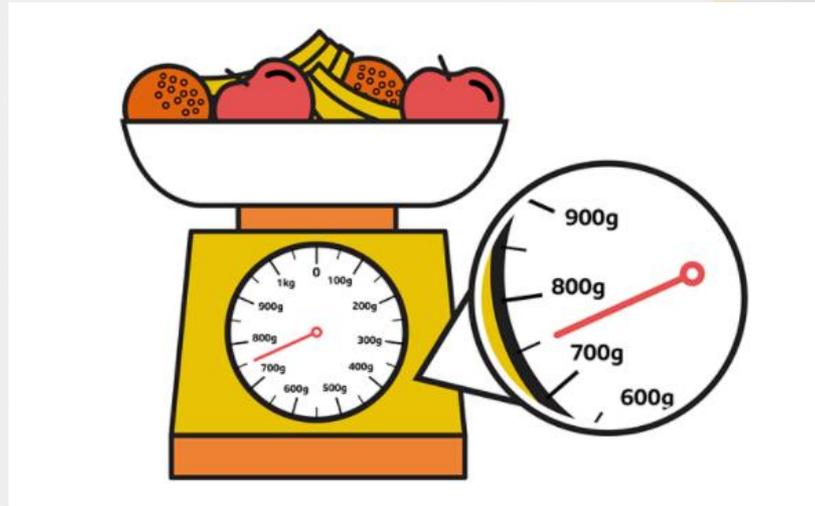
The screenshot shows a web browser window displaying a BBC Bitesize video player. The browser's address bar shows the URL <https://www.bbc.co.uk/bitesize/clips/zv2vcdm>. The video player interface includes a red header with a white sigma symbol ( $\Sigma$ ) and a yellow header with a white plus sign (+). The main content area features the title "1st level Measuring weight - grams and kilograms" and a subtitle "Part of Maths and Numeracy | Measurement". Below the title, the duration "Duration 02:33" is displayed. A video player window shows a man in a white apron standing in a kitchen, demonstrating measurement. To the right of the video player, there is a "More Clips" section with three video thumbnails: "Measuring weight - grams and kilograms (signed)", "Reading different scales", and "Reading scales". Below the video player, there is a "Description" section with a "Classroom Ideas" button. The description text reads: "The Chuckle Brothers use apples to show how to measure and record weight and convert grams into kilograms. Standard metric units and their abbreviations are used to measure and". The Windows taskbar at the bottom shows the search bar with the text "Type here to search", several application icons, and the system tray with the time "16:10" and date "19/02/2021".

## Reading Scales



We are going to start by learning how to read scales when it comes to grams and kilograms. Some of numbers might be missing on the scale, so we have to use intervals to help s work out what the missing numbers might be.

# Reading Scales

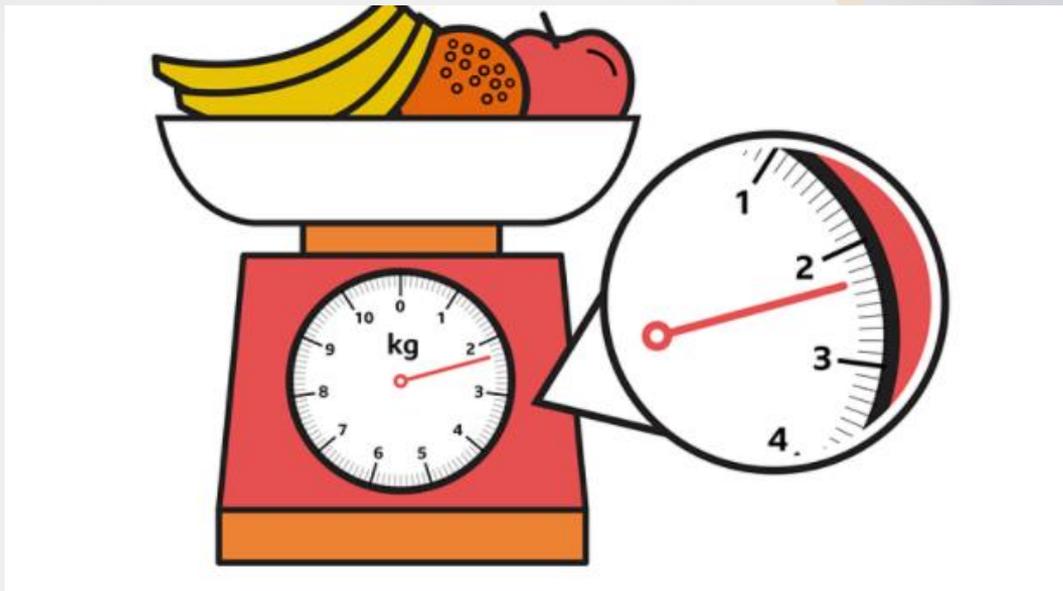


When reading scales, the first thing you have to do is look at the intervals. What are the divisions going up in?

The larger intervals go up in hundreds. You can also see there is a smaller interval in between each hundred. This must be worth 50 g since it is the halfway point between hundreds.

The arrow on the dial is pointing at the smaller division between 700 g and 800 g, so the mass of the fruit must be 750 g

## Reading Scales



The arrow is between 2 kg and 3 kg, but what do the intervals represent?  
The kilograms are split up into 10 divisions, so each one must represent 100 g, since 10 lots of 100 g is 1 kg.

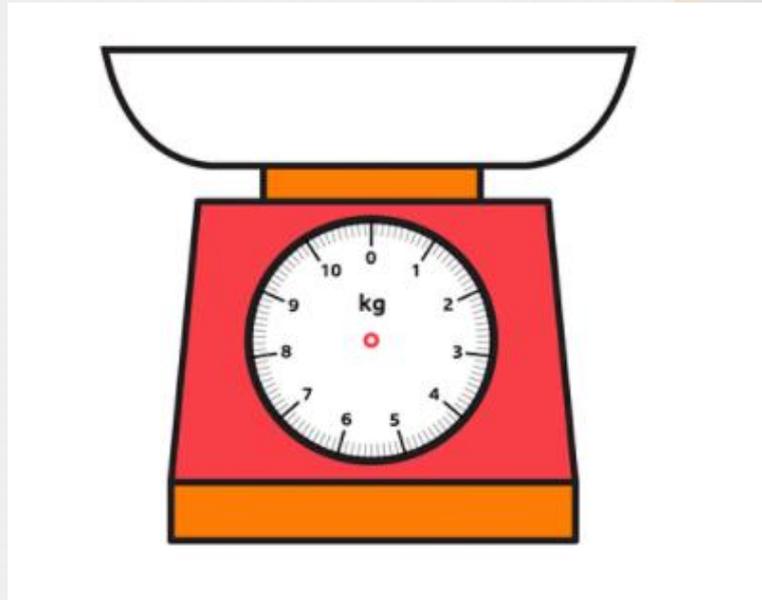
The arrow is on the third division after 2 kg, so the weight of the potatoes is  
2kg 300g

What would 2 kg 300 g be in just grams?

2 kg is the same as 2000 g. So:

$$2000 \text{ g} + 300 \text{ g} = 2300 \text{ g}$$

## Reading Scales



How would you draw an arrow to represent the mass of 7 kg and 800 g?

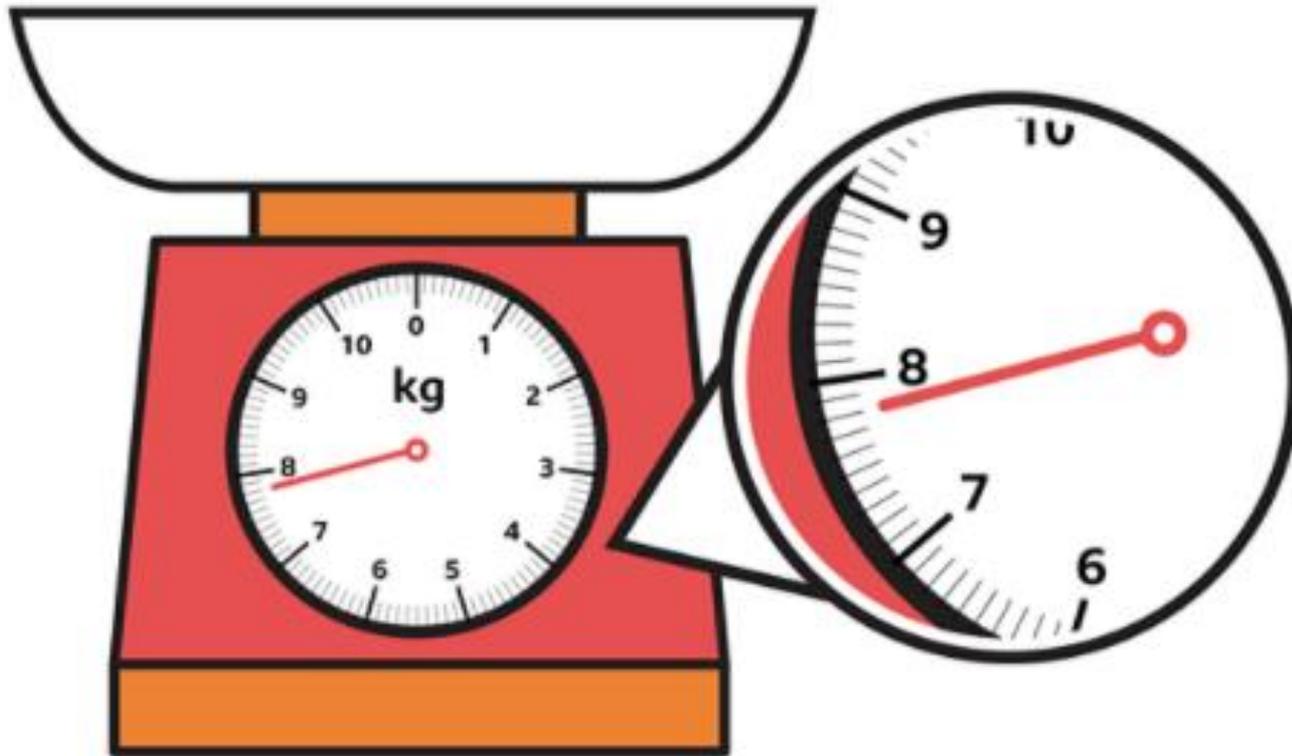
First thing to do is work out what the smaller divisions represent in-between the whole kilograms.

The kilograms are split up into 10 divisions, so each one must represent 100g.

Now, you have to find the 8th division after 7kg and draw an arrow to represent 7kg 800g.

Answer on next slide...

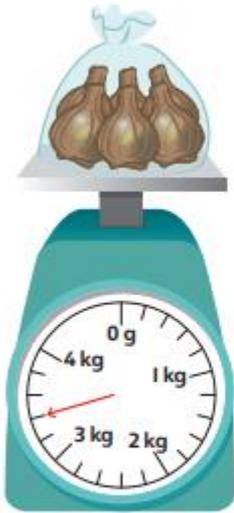
# Answer



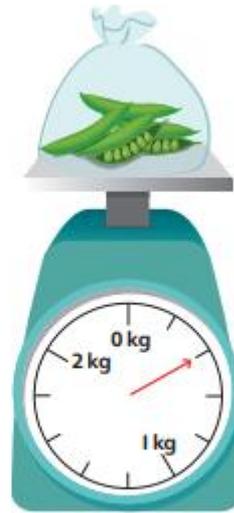
# Practise

Let's practise reading scales using grams and kilograms.

- 1 Write the mass of these vegetables in kilograms and grams.



a) The onions have a mass of  kg  g.



b) The peas have a mass of  g.

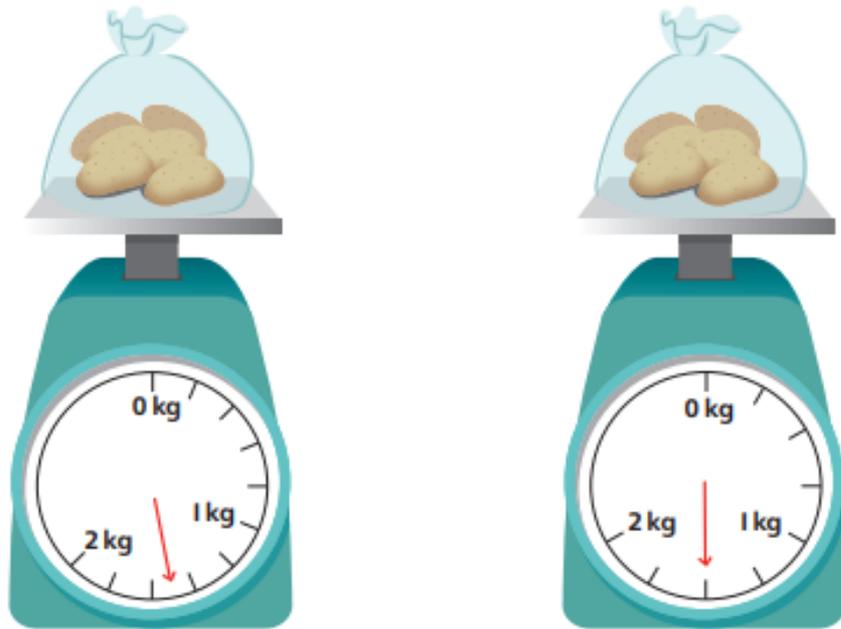
Try to work out each interval first by counting on.



# Practise

Let's practise reading scales using grams and kilograms.

- 2** a) What is the mass of the bag of potatoes?



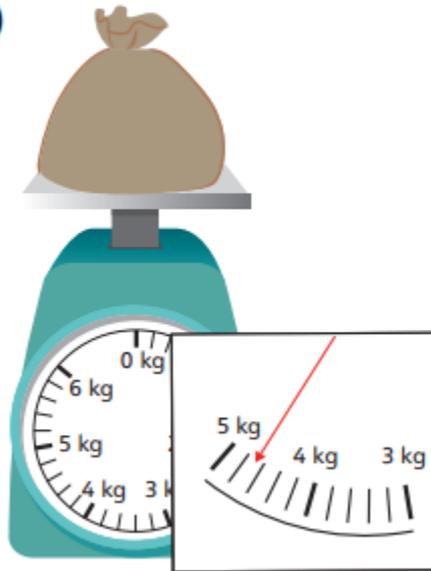
- b) What do you notice about the scales?

# Practise

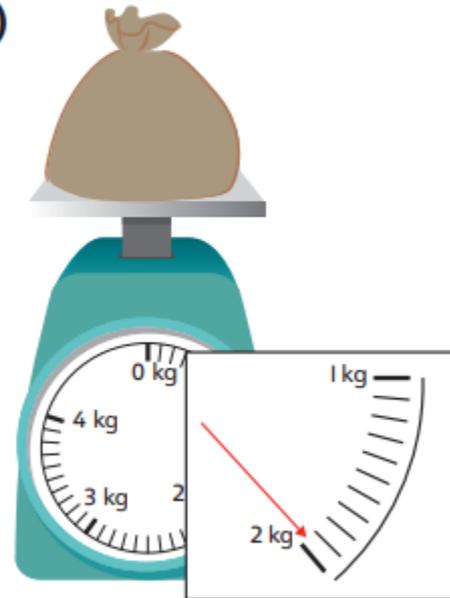
Let's practise reading scales using grams and kilograms.

**3** Use the scales to find the mass of each bag.

a)



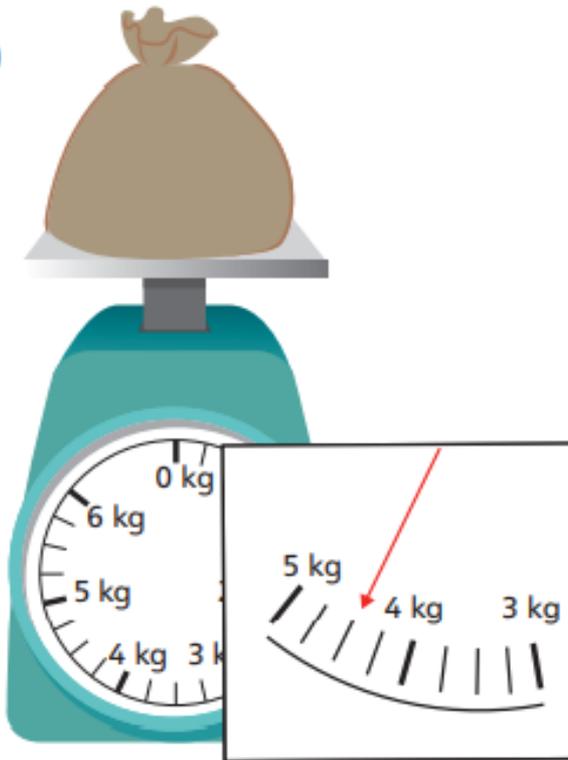
c)



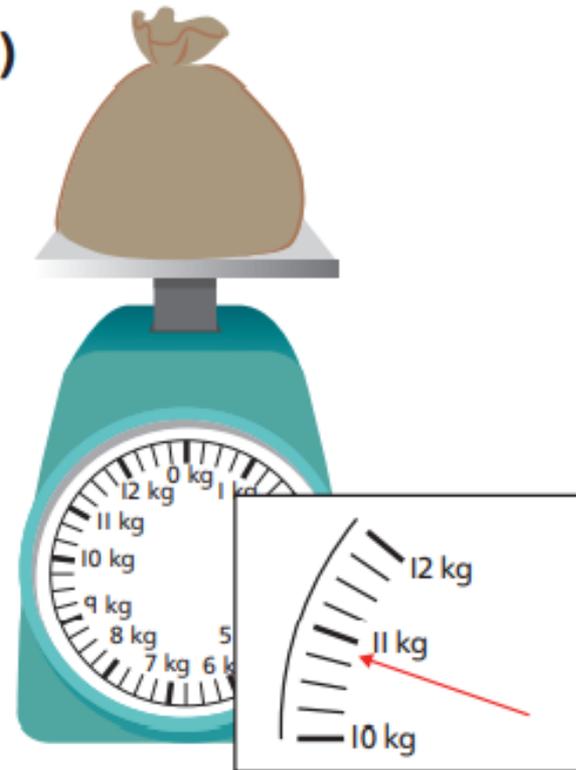
# Practise

Let's practise reading scales using grams and kilograms.

b)



d)



## Reading scales using grams and kilograms

### Activity

**Red** Group: Complete worksheet 1

**Yellow** Group: Complete worksheet 2

**Green** Group: Complete worksheet 3

# Challenge

Try the challenge questions using 'Challenge Worksheet'

- 1) What mass is shown on the scales?
- 2) Mark the same mass on these scales.

