

Year 1/2 – Spring Block 4 – Weight and Volume – Step 3

About This Resource:

This PowerPoint has been designed to support your teaching of this small step from the Mixed Age planning. It includes a starter activity suitable for each year group and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack (separate for each year group). Each slide has the year group identified in the bottom right-hand corner. We recommend that you look through this PowerPoint in advance and decide whether to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 1: (1M1) [Compare, describe and solve practical problems for: lengths and heights \[for example, long/short, longer/shorter, tall/short, double/half\] mass/weight \[for example, heavy/light, heavier than, lighter than\] capacity and volume \[for example, full/empty, more than, less than, half, half full, quarter\] Time \[for example, quicker, slower, earlier, later\]](#)

Mathematics Year 1: (1M2) [Measure and begin to record: lengths and heights mass/weight capacity and volume time \(hours, minutes, seconds\)](#)

Mathematics Year 2: (2M1) [Compare and order lengths, mass, volume/capacity and record the results using \$>\$, \$<\$ and \$=\$](#)
Mathematics Year 2: (2M2) [Choose and use appropriate standard units to estimate and measure length/height in any direction \(m/cm\); mass \(kg/g\); temperature \(\$^{\circ}\text{C}\$ \); capacity \(litres/ml\) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels](#)

More [Year 1 and Year 2 Weight and Volume](#) resources.

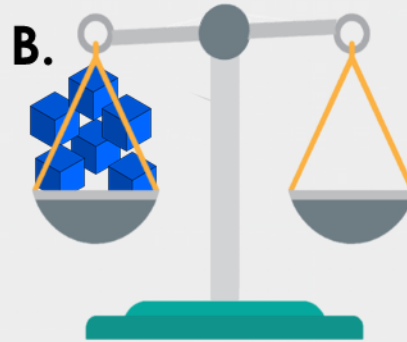
Did you like this resource? Don't forget to [review](#) it on our website.

Step 3

Year 1: Compare Mass
Year 2: Measure Mass (kg)

Introduction

Match the object to the correct scale.



4 cubes



8 cubes



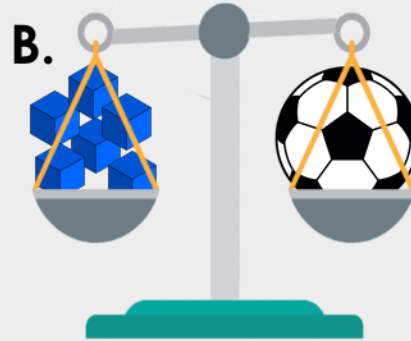
6 cubes

Introduction

Match the object to the correct scale.



4 cubes



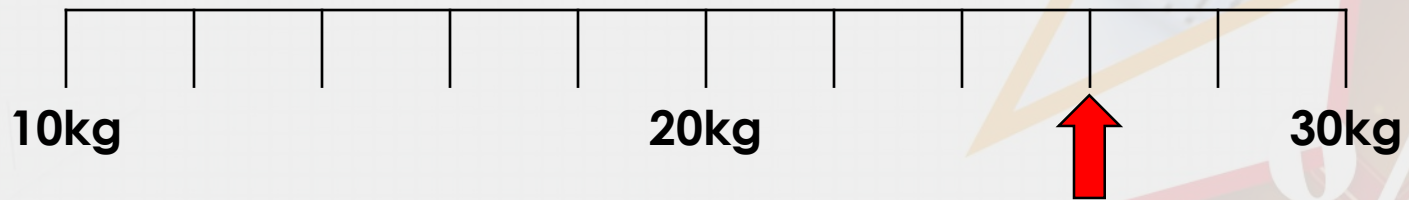
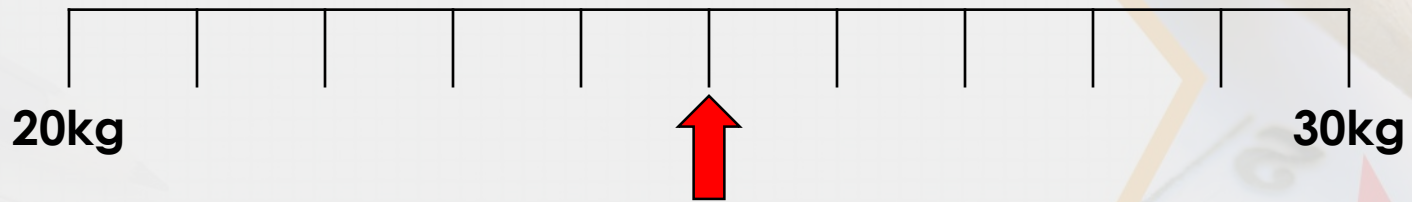
6 cubes



8 cubes

Introduction

Identify which kilogram each arrow is pointing to on the scales.



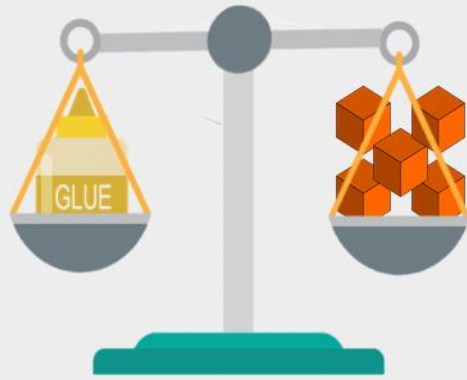
Introduction


Identify which kilogram each arrow is pointing to on the scales.



Varied Fluency 1

Choose the word to complete the sentence below.



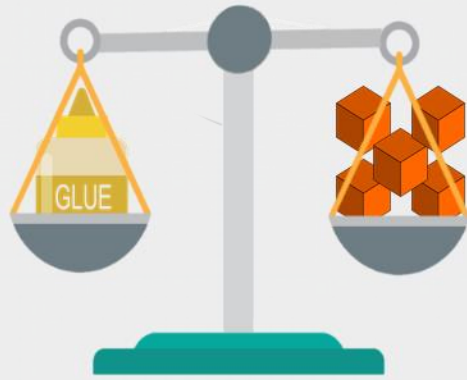
The  is than the .

heavier

lighter

Varied Fluency 1

Choose the word to complete the sentence below.



The  is than the .

heavier

lighter

Varied Fluency 2

True or false? The bottle is heavier than the pepper.



Varied Fluency 2

True or false? The bottle is heavier than the pepper.

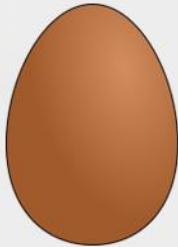


True, the bottle weighs 8 pencils and the pepper weighs 4 pencils.

Varied Fluency 3

Order the objects, heaviest to lightest.

A.



an egg
weighs



B.



a carrot
weighs



C.



a bun
weighs

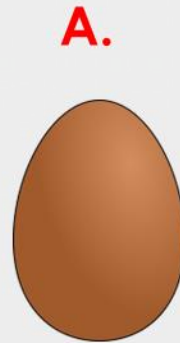
2 marbles
lighter than
an egg

Varied Fluency 3

Order the objects, heaviest to lightest.



**a carrot
weighs**



**an egg
weighs**

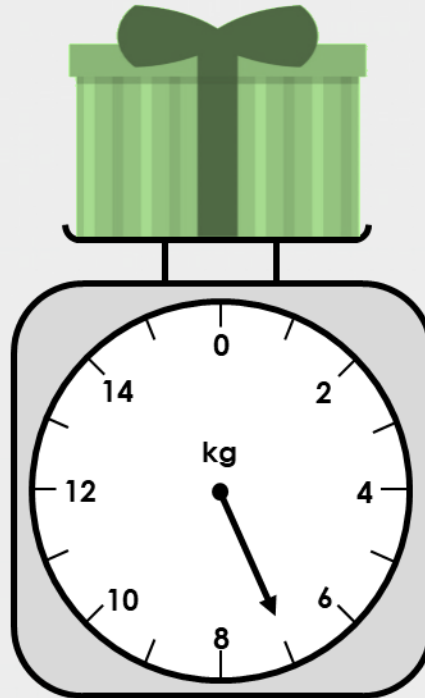


**a bun
weighs**



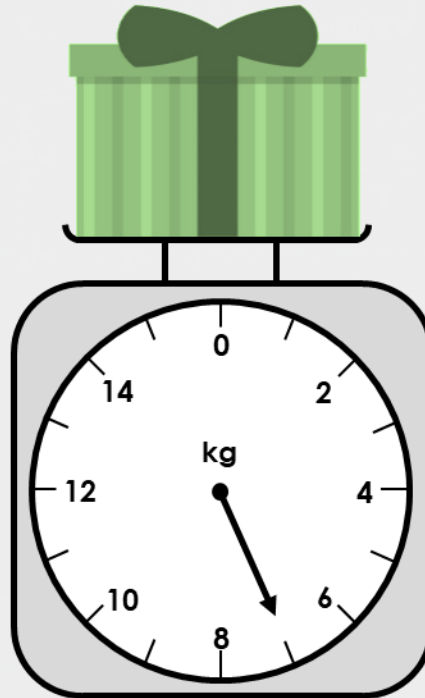
Varied Fluency 1

What weight does the scale show?



Varied Fluency 1

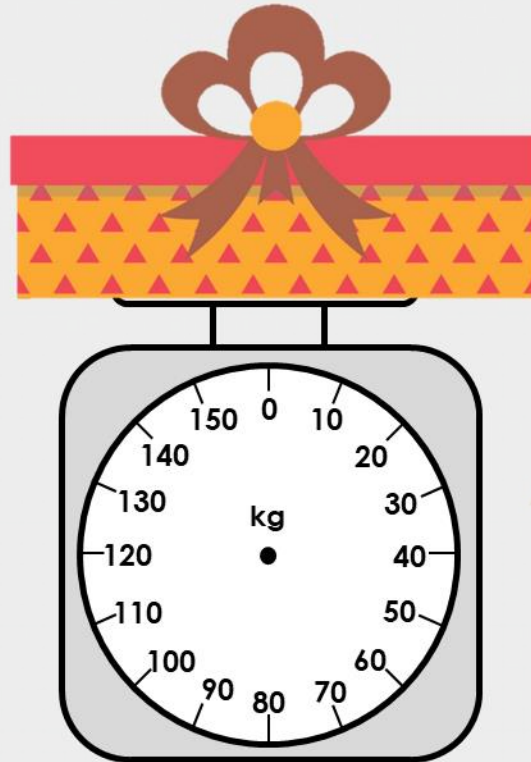
What weight does the scale show?



7kg

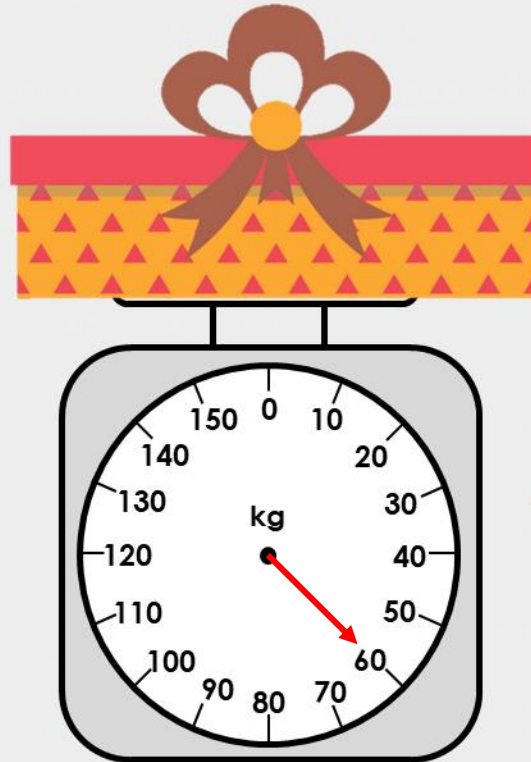
Varied Fluency 2

Add an arrow to the scale so that it shows 60kg.



Varied Fluency 2

Add an arrow to the scale so that it shows 60kg.



Varied Fluency 3

Order these toys from lightest to heaviest.



20kg



12kg



15kg

Varied Fluency 3

Order these toys from lightest to heaviest.



12kg



15kg



20kg

Varied Fluency 4

Circle the most reasonable estimate for the mass of this person.



10kg

1kg

100kg

Varied Fluency 4

Circle the most reasonable estimate for the mass of this person.



10kg

1kg

100kg

Problem Solving 1

A football boot weighs 20 pencils.
A music player weighs 7 pencils.



5

13

3

How many pencils are needed to make the scales balance?

Problem Solving 1

A football boot weighs 20 pencils.
A music player weighs 7 pencils.



5

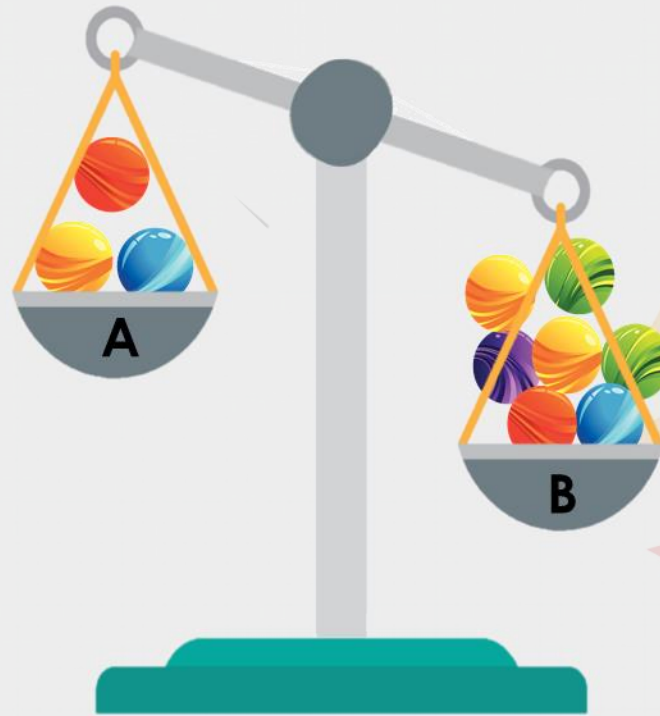
13

3

How many pencils are needed to make the scales balance?

Reasoning 1

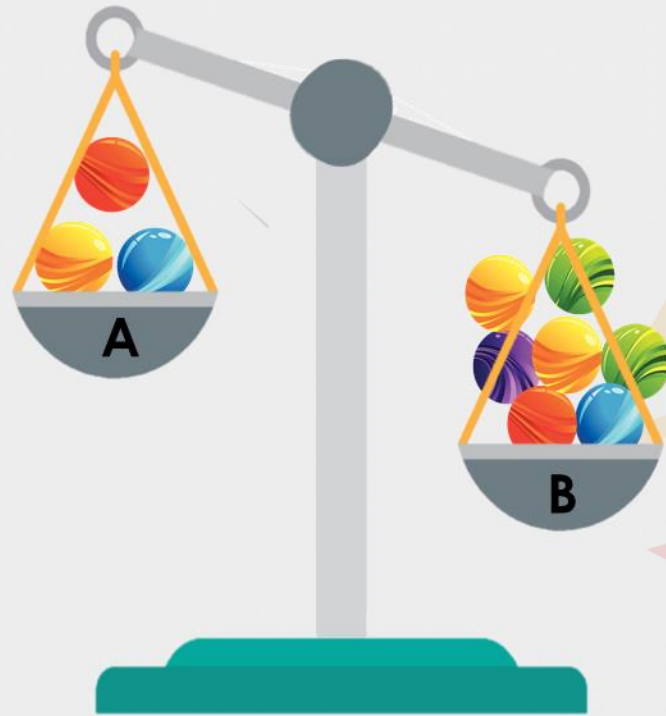
George wants the scales to balance. He thinks he could move some marbles to do this.



Is he correct? Explain your answer.

Reasoning 1

George wants the scales to balance. He thinks he could move some marbles to do this.

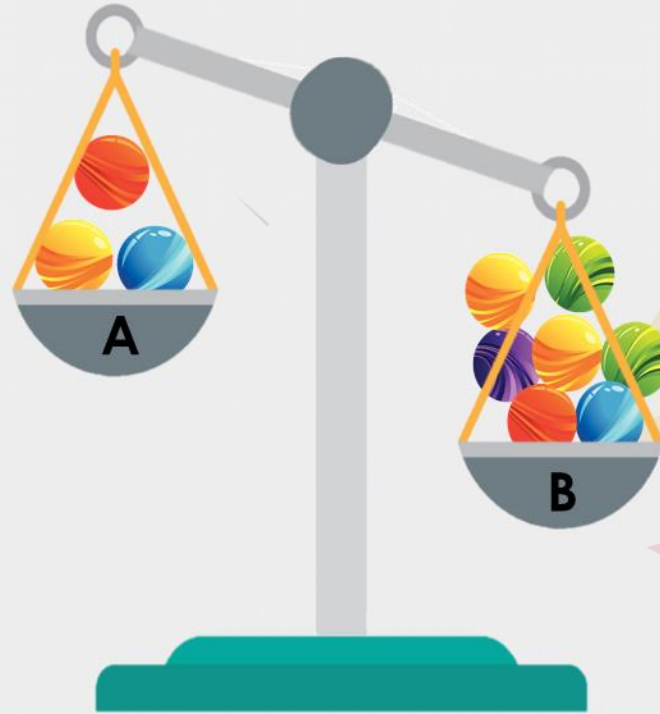


Is he correct? Explain your answer.

He is correct because...

Reasoning 1

George wants the scales to balance. He thinks he could move some marbles to do this.



Is he correct? Explain your answer.

He is correct because he could move 2 marbles from tray B to tray A, so that they would then have 5 marbles on each side.

Y1

Problem Solving 2

Draw an arrow to show how you could position the objects on the scales to make them balance.



7 blocks



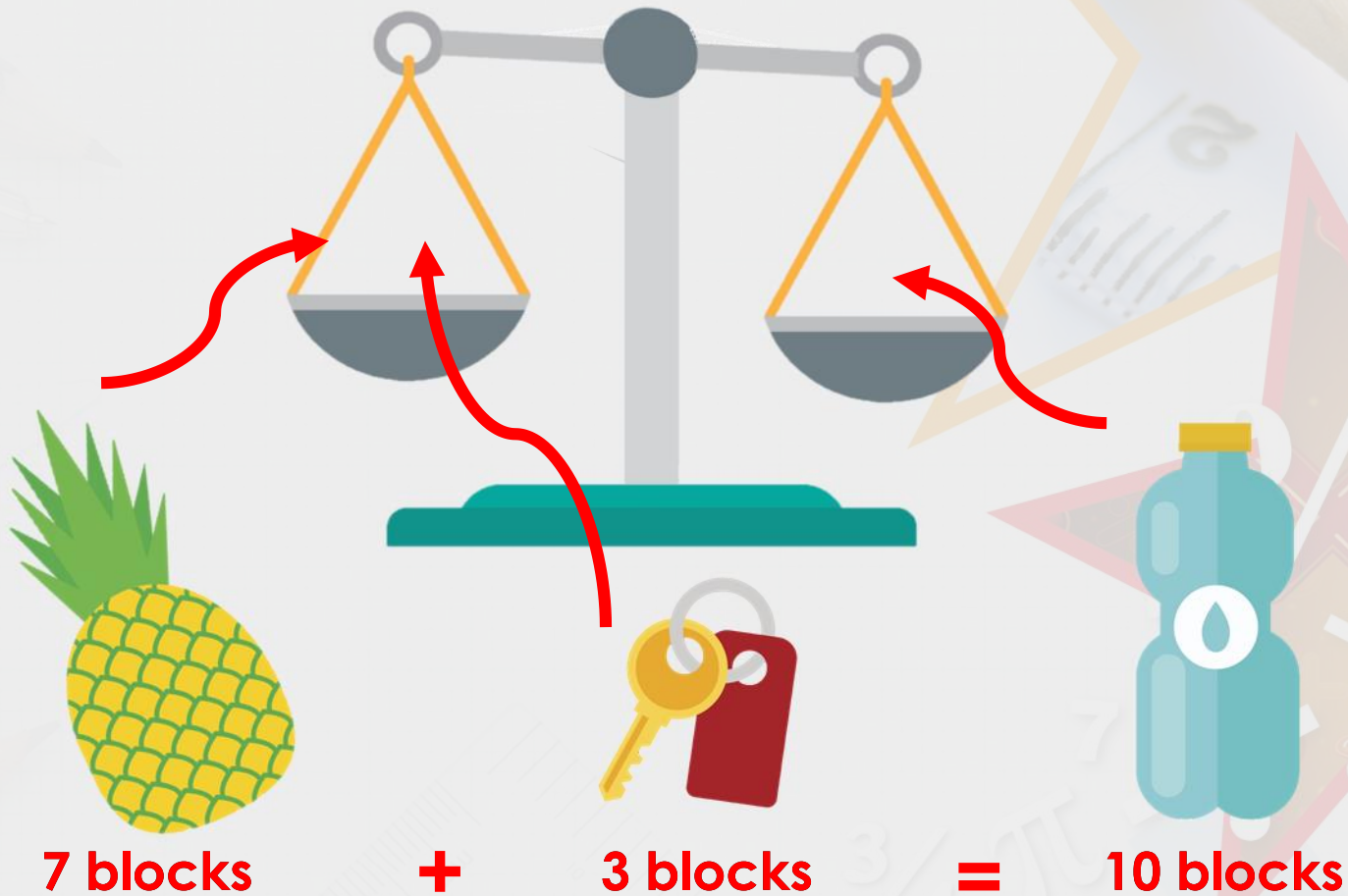
3 blocks



10 blocks

Problem Solving 2

Draw an arrow to show how you could position the objects on the scales to make them balance.



Problem Solving 1


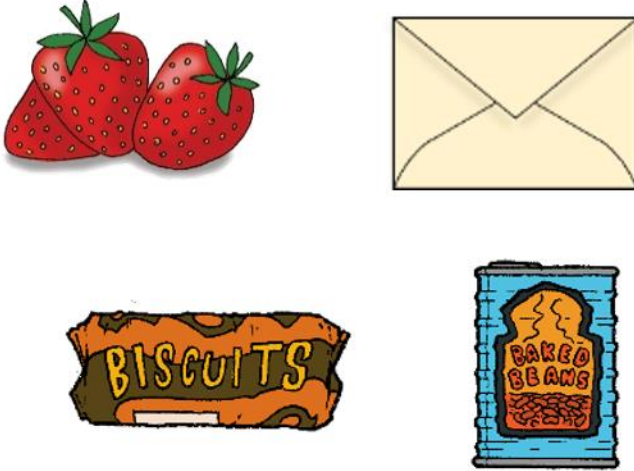
Sort the objects into the table.

Things you would weigh in kilograms	Things you would weigh in grams



Problem Solving 1

Sort the objects into the table.

Things you would weigh in kilograms	Things you would weigh in grams
 An orange bicycle with a green seat and blue wheels is shown next to a brown and white spotted cow.	 Three red strawberries with green leaves are shown next to a yellow envelope. Below them is a pack of biscuits labeled 'BISCUITS' and a blue tin of baked beans labeled 'BAKED BEANS'.

Problem Solving 2

Use $<$ or $>$ to complete this statement.

Dog

30kg

Cow

290kg

Chair

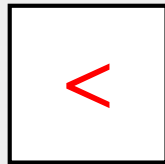
8kg

Problem Solving 2

Use $<$ or $>$ to complete this statement.

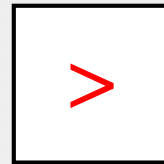
Dog

30kg



Cow

290kg

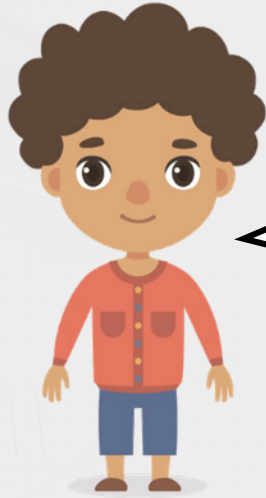


Chair

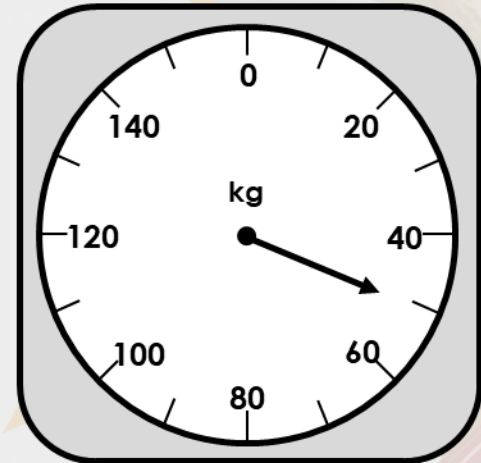
8kg

Reasoning 1

The scale shows how much a Year 2 child weighs.



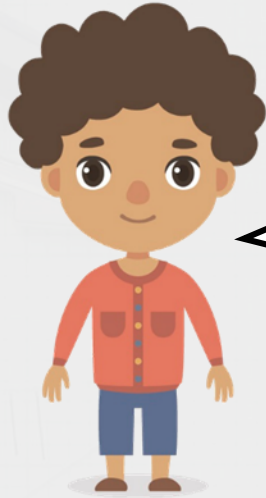
I weigh 41kg.



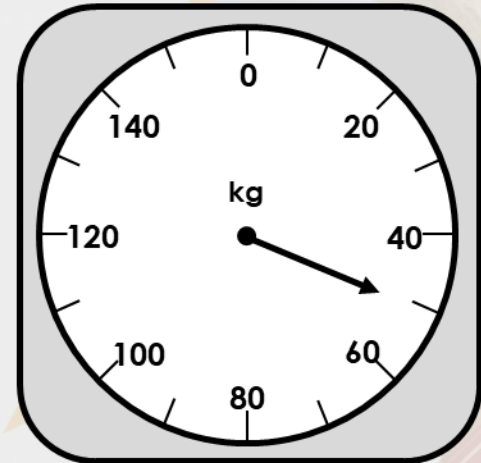
Is Nick correct? How can you tell?

Reasoning 1

The scale shows how much a Year 2 child weighs.



I weigh 41kg.

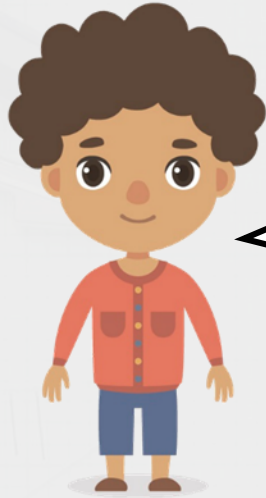


Is Nick correct? How can you tell?

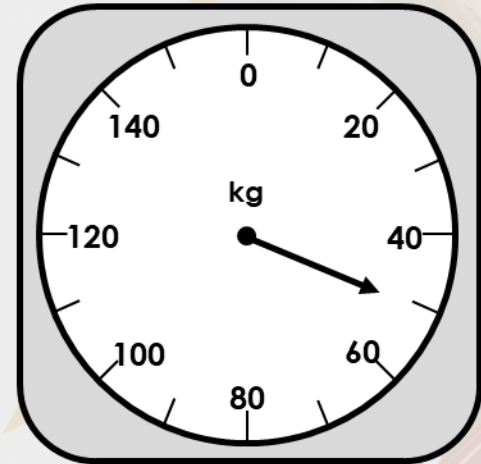
Nick is incorrect because...

Reasoning 1

The scale shows how much a Year 2 child weighs.



I weigh 41kg.



Is Nick correct? How can you tell?

Nick is incorrect because the scale shows 50kg.