



# Maths

## Measurement

# Need a coherently planned sequence of lessons to complement this resource?

**Lesson Breakdown**

Below is our suggestion for the most coherent and progressive sequence to teach this area of Year 1 Maths. Click on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which the lessons are presented.

**Understanding Length and Height (1): Height Comparison**  
This lesson teaches children to compare the heights of familiar objects, of height such as tall, short, taller, shorter, tallest and shortest. The lesson also teaches or shorter than other objects as well as comparing objects with the presentation, activity sheets and our fantastic Drawing in Memory Cards that

**NC Statement:** Compare, describe and solve practical problems for lengths and heights.  
**Lesson Aim:** To compare the heights of objects.

**Measuring Length and Height (1): Measure Height (Using Non-Standard)**  
A few children to begin measuring using non-standard measurement demonstrates how to accurately measure objects and goes for encouraged towards the help of various objects within their classroom as pack also includes our Drawing in Memory Cards that give opportunities for

**NC Statement:** Measure and begin to record lengths and heights.  
**Lesson Aim:** To measure height using non-standard units.

**Understanding Length and Height (2): Length Comparisons**  
This lesson teaches children to compare the length of various objects. They are taught length including 'long', 'short', 'longer', 'shorter' and 'shortest'. The lesson includes presentation, activity sheets and our fantastic Drawing in Memory Cards that

**NC Statement:** Compare, describe and solve practical problems for lengths and heights.  
**Lesson Aim:** To compare the length of objects.

**Introduction**

This unit will introduce children to the concept of measurement in different areas, such as length and height, capacity, weight, money and time. Children learn the vocabulary they will need to compare and describe measurements and develop their reasoning skills through solving practical problems. The children explore both non-standard and standard units of measure and apply their skills of measuring and recording in a range of real life contexts. They also learn to recognise events in chronological order, an language related to dates and begin to tell the time on an analogue clock.

**Assessment Statements**

By the end of this unit, children working towards the expected level will be able to:

- describe and compare lengths, heights, capacities, weights and times using simple vocabulary;
- measure lengths, heights, capacities, weights and using non-standard units;
- recognise some coins and notes;
- put two or three simple events in chronological order;
- recognise and use the names of the days of the week and know some months of the year;
- tell the time to the hour on an analogue clock and draw the hands;
- reason about measurements to solve simple practical problems.

Children working at the expected level will be able to:

- describe and compare lengths, heights, capacities, weights and times using mathematical vocabulary;
- measure lengths, heights, capacities, weights times using a standard and non-standard unit;
- know the value of coins and notes;
- sequence four or five events in chronological order;
- order the days of the week and months of the year;
- tell the time to the hour and half past the hour on an analogue clock;
- draw the hands on an analogue clock face to the hour and half past the hour;
- understand fully numbered scales such as money (to 100);
- reason about measurements to solve practical problems.

**Measurement**  
Maths Year 1 (1) Core and Progression Overview

The aim of this overview is to support teachers using First Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within First Maths, whenever possible. Lesson packs have been matched to each of the annual steps on the White Rose Maths scheme of learning.

**Yearly Overview**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Autumn</b>	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)			Geometry: Shape		Number: Place Value (within 20)		Consolidation		
<b>Spring</b>	Number: Addition and Subtraction (within 20)			Number: Place Value (within 50) (Multiples of 2, 5 and 10 to be included)			Measurement: Length and Height		Measurement: Weight and Volume			Consolidation
<b>Summer</b>	Number: Multiplication and Division (Multiples of 2, 5 and 10 to be included)		Number: Fractions		Geometry: Capacity and Volume	Number: Place Value (within 100)		Measurement: Money	Time		Consolidation	

# Measuring Mass



# Aim

- To measure mass.

# Success Criteria

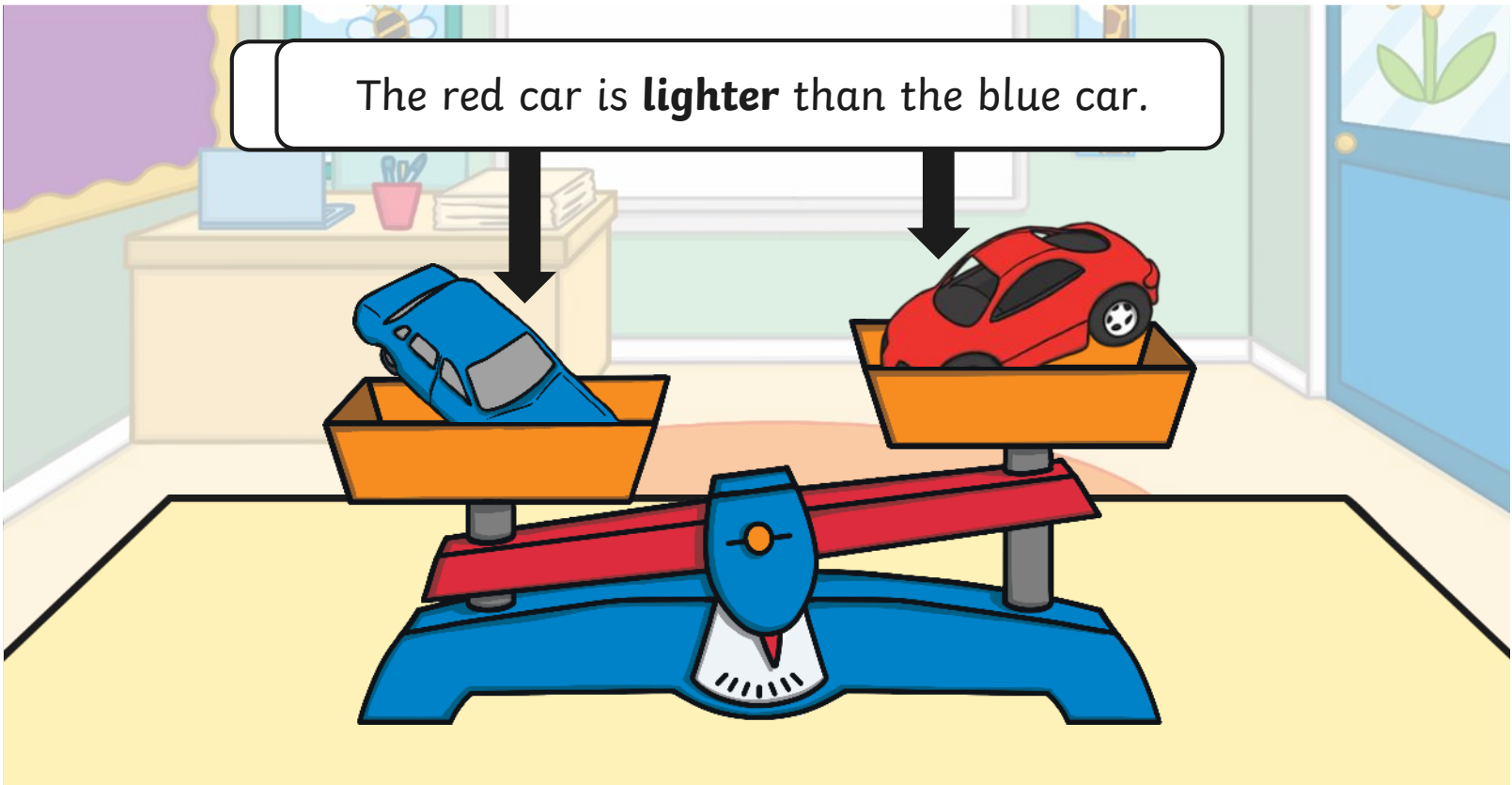
- I can use non-standard units to measure mass.
- I can describe measurements of mass.
- I can reason about mass.

# Remember It



What are the balance scales telling us about the mass of the toy cars?

The red car is **lighter** than the blue car.



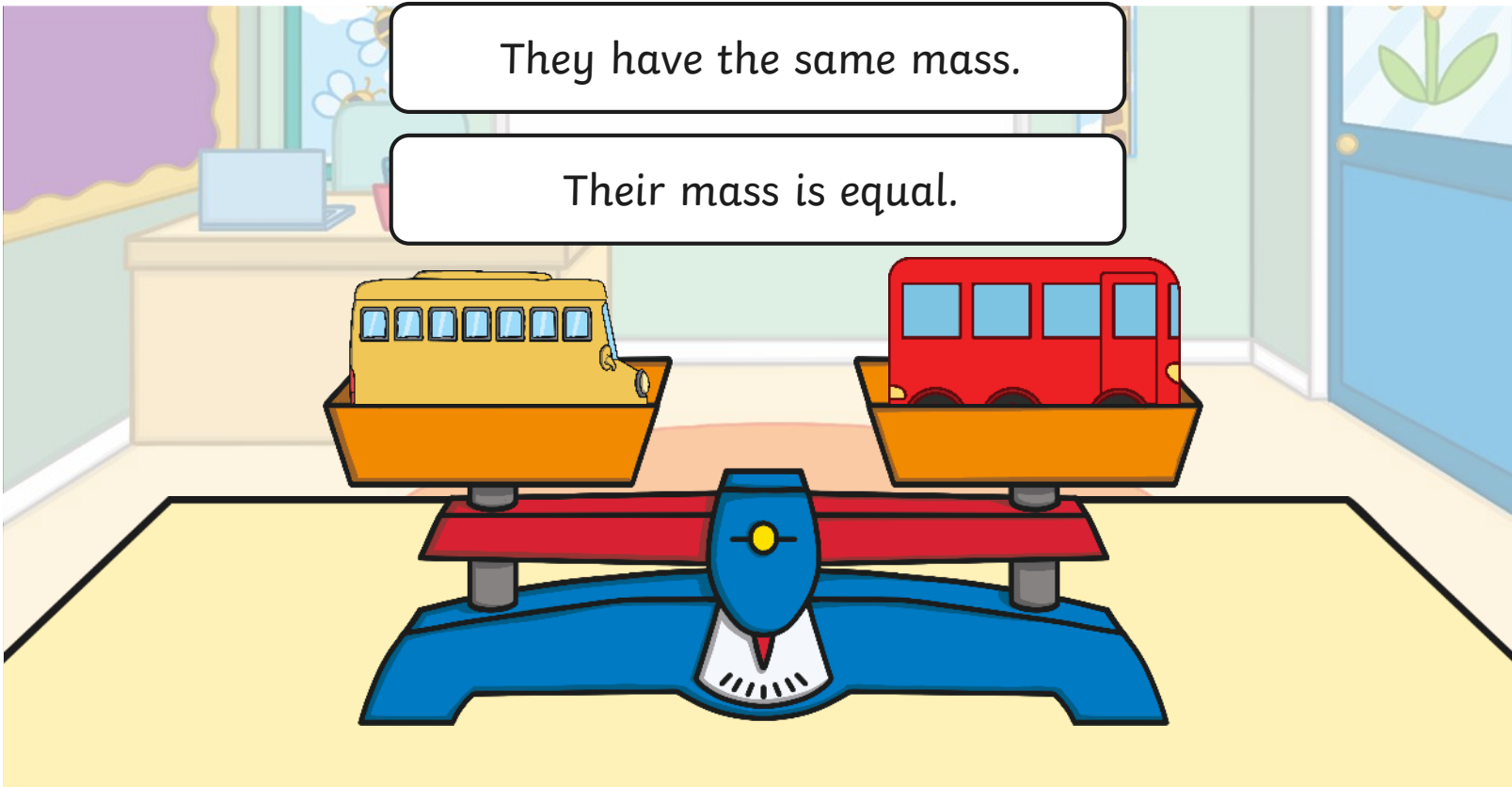
# Remember It



What are the balance scales telling us about the mass of the toy buses?

They have the same mass.

Their mass is equal.



# Measuring Mass



We can use a balance scale to measure mass.

What does it mean when the balance scales looks like this?

When the sides of the scale are balanced, the mass on each side is the same.

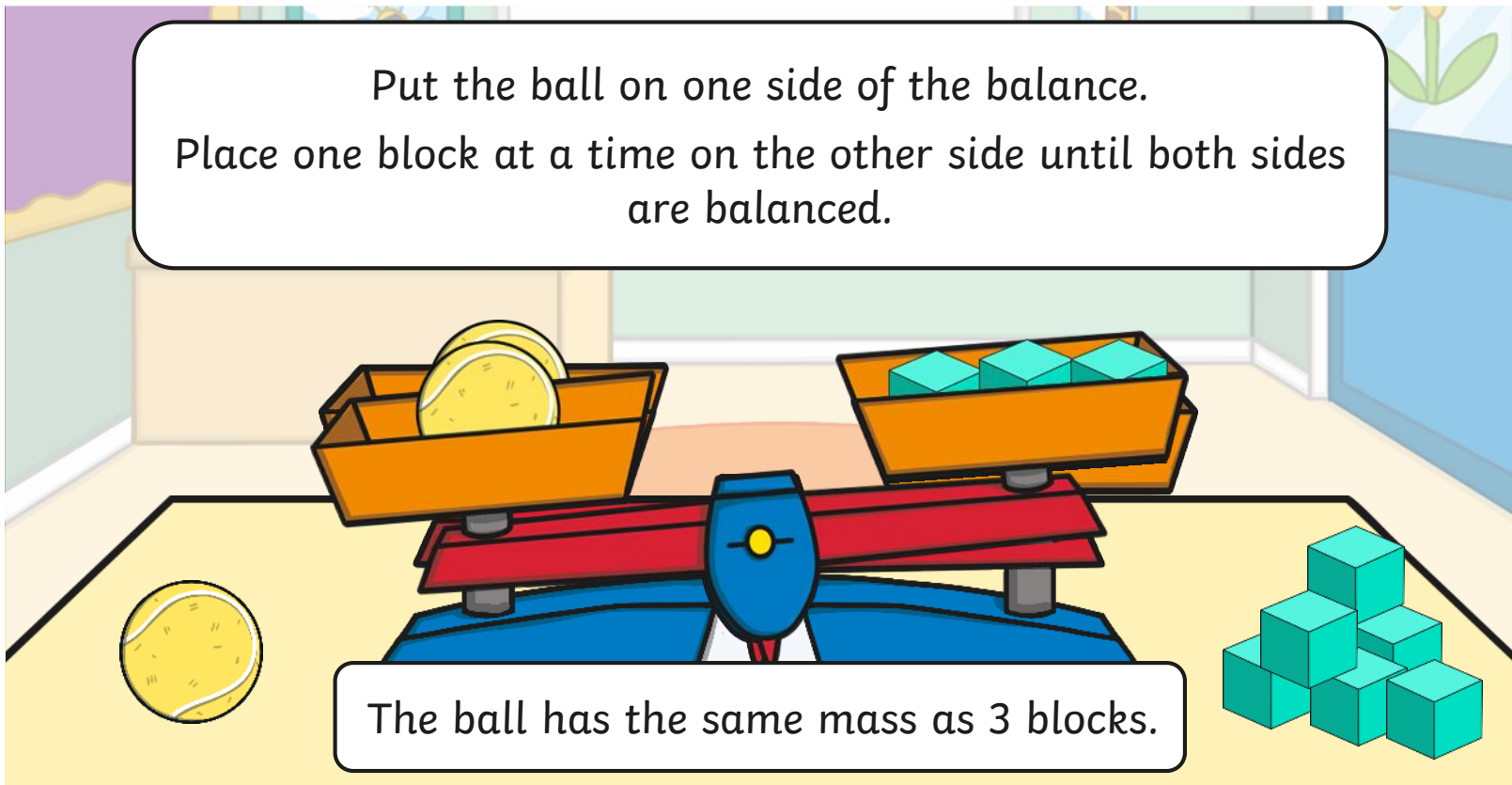
They have an equal mass.

# Measuring Mass



How can we use the balance scales and blocks to measure the mass of the ball?

Put the ball on one side of the balance.  
Place one block at a time on the other side until both sides  
are balanced.



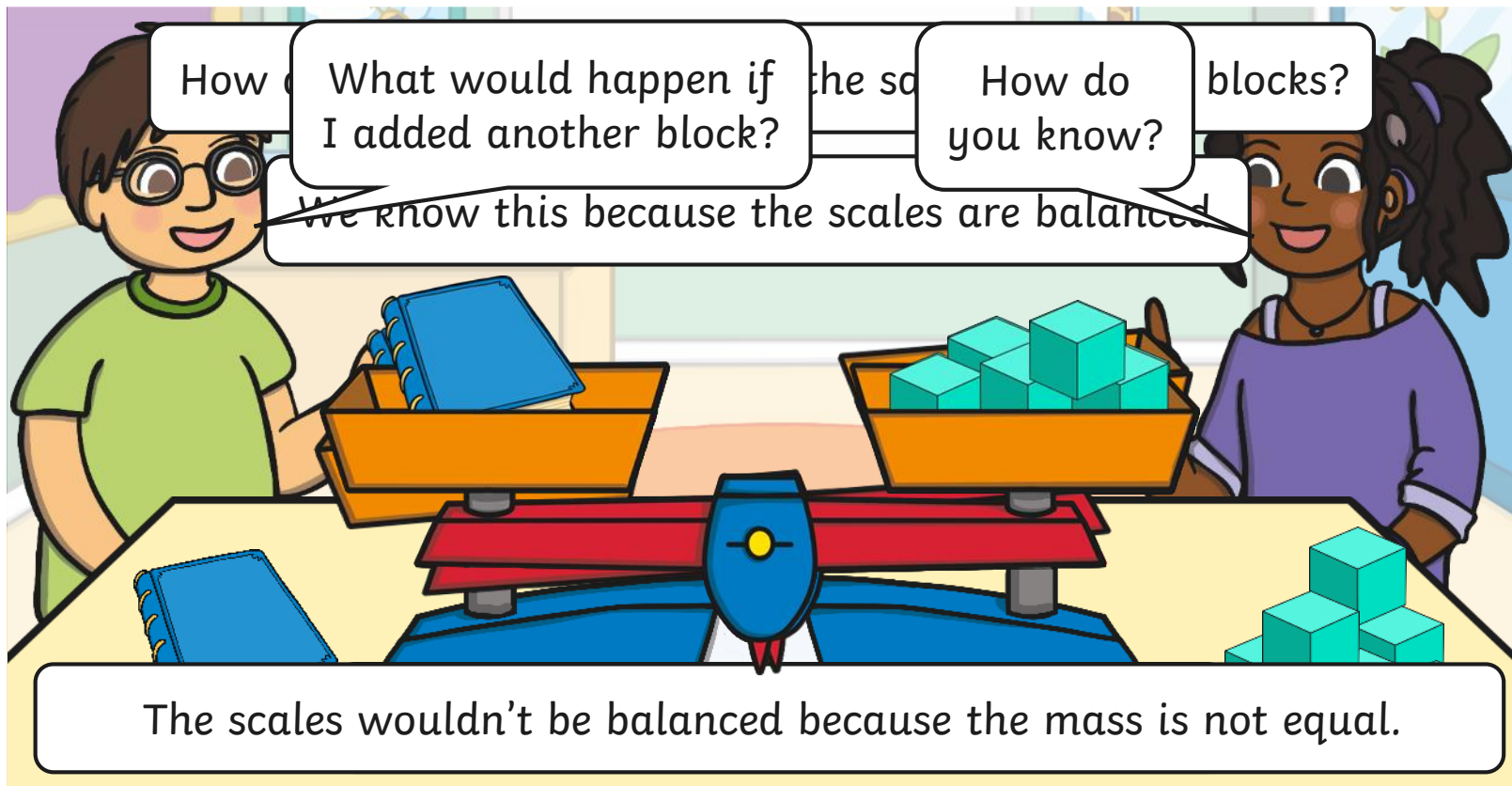
The ball has the same mass as 3 blocks.



# Measuring Mass



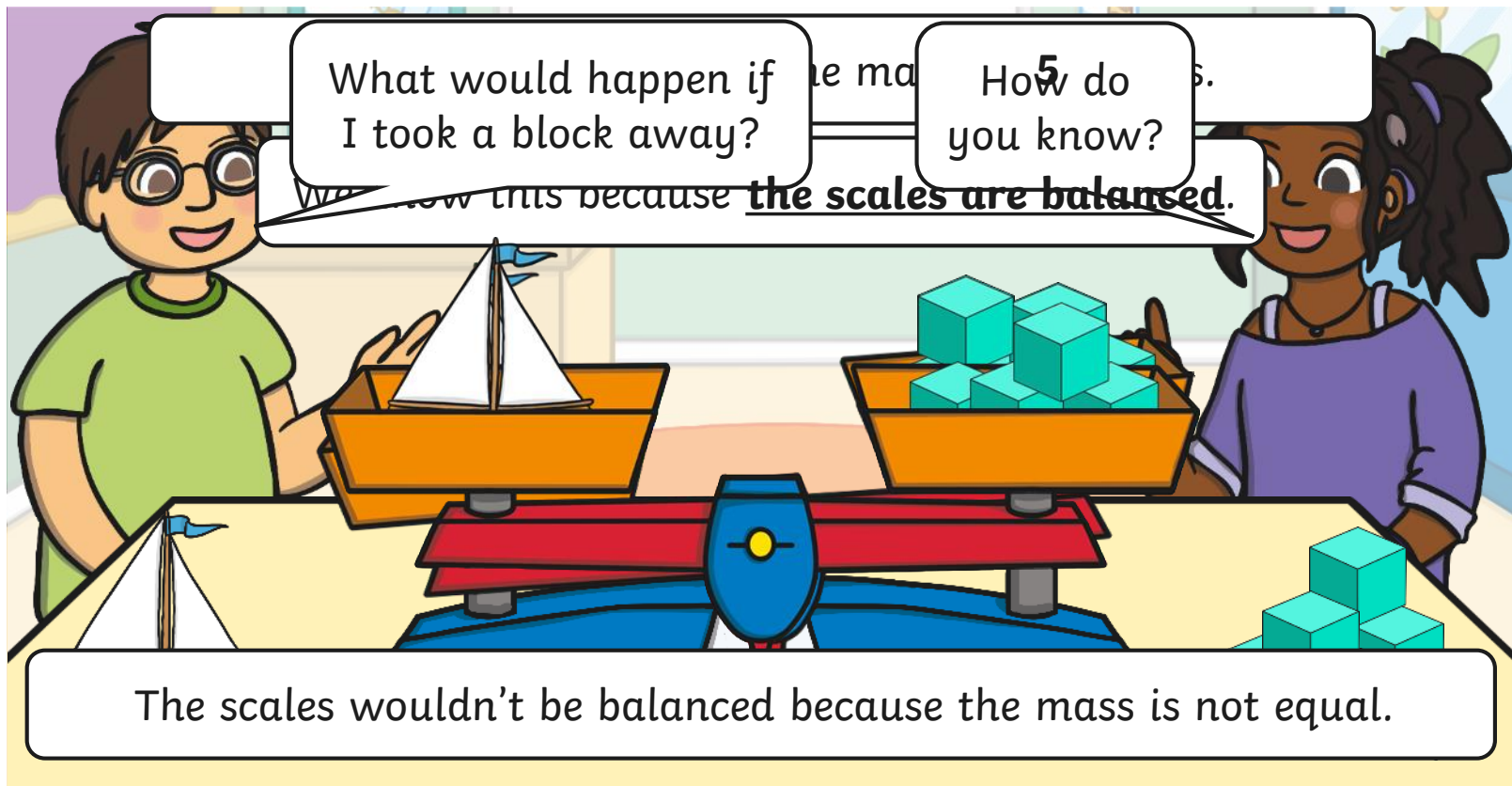
Let's find out how many blocks are equal to the book.



# Measuring Mass



What is the mass of the toy boat?



# Try It

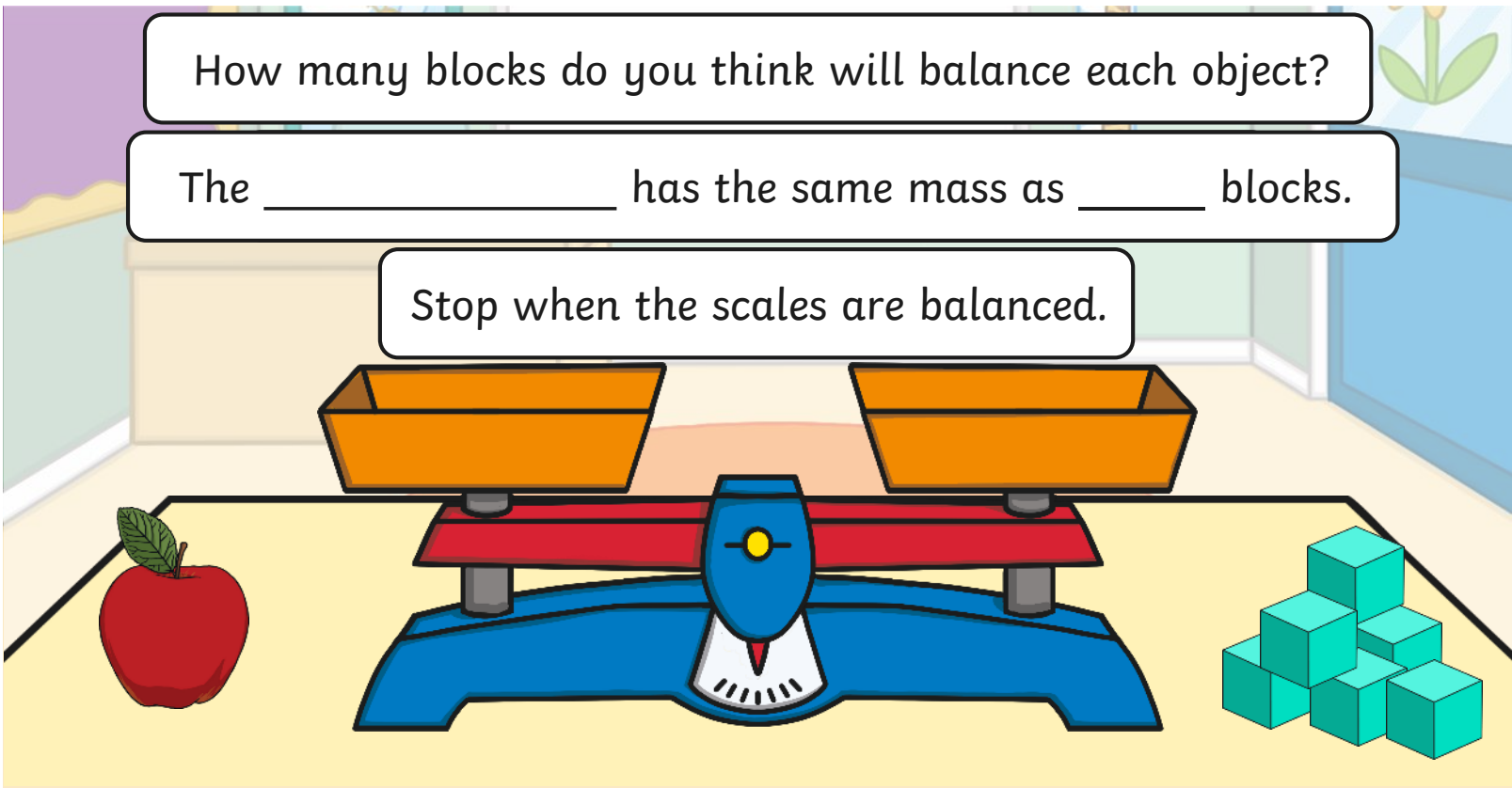


Use blocks to measure the mass of classroom objects.

How many blocks do you think will balance each object?

The \_\_\_\_\_ has the same mass as \_\_\_\_\_ blocks.

Stop when the scales are balanced.



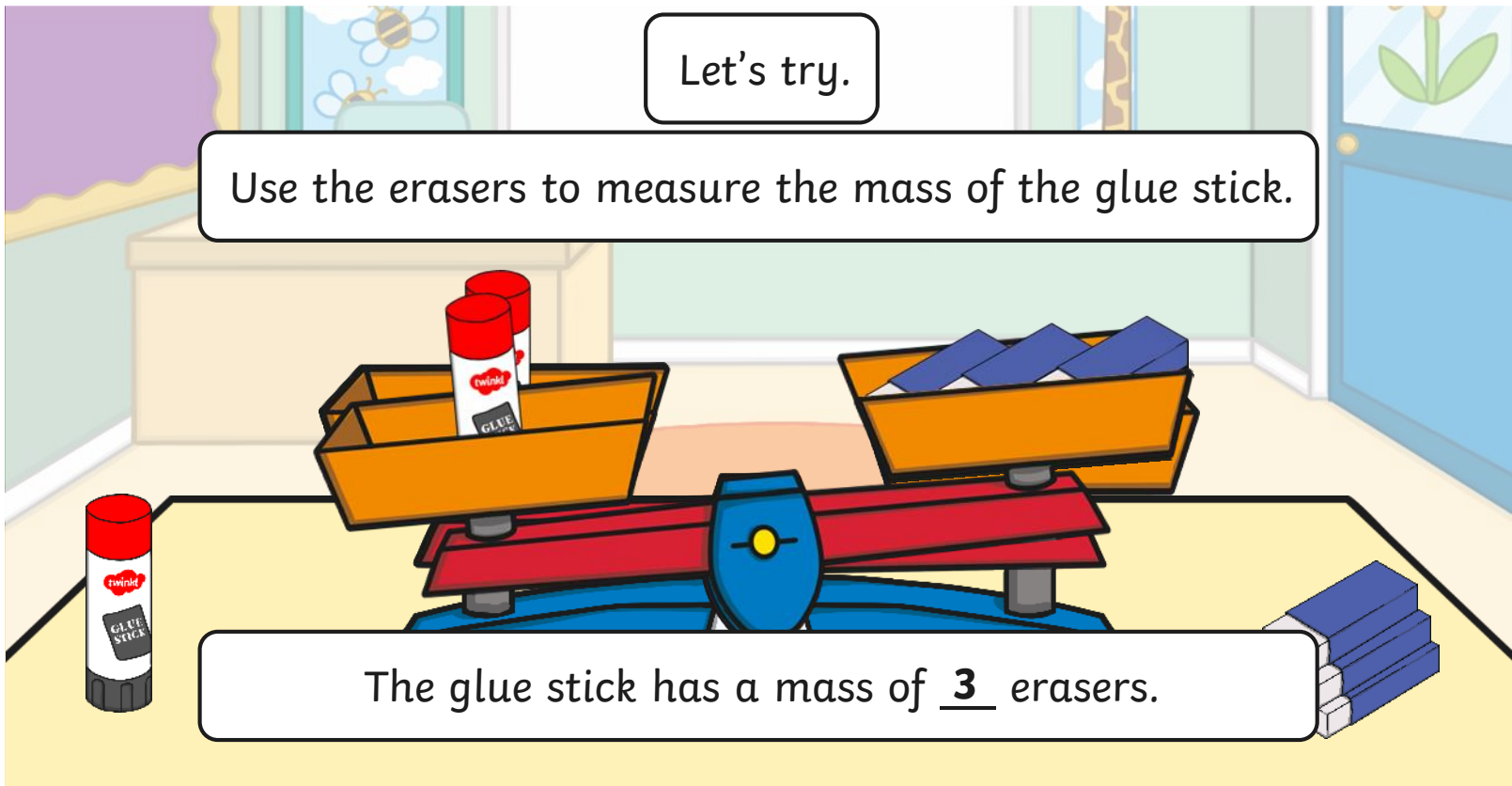
# Measuring Mass with Different Units



Can we use different units to measure the mass of objects?

Let's try.

Use the erasers to measure the mass of the glue stick.



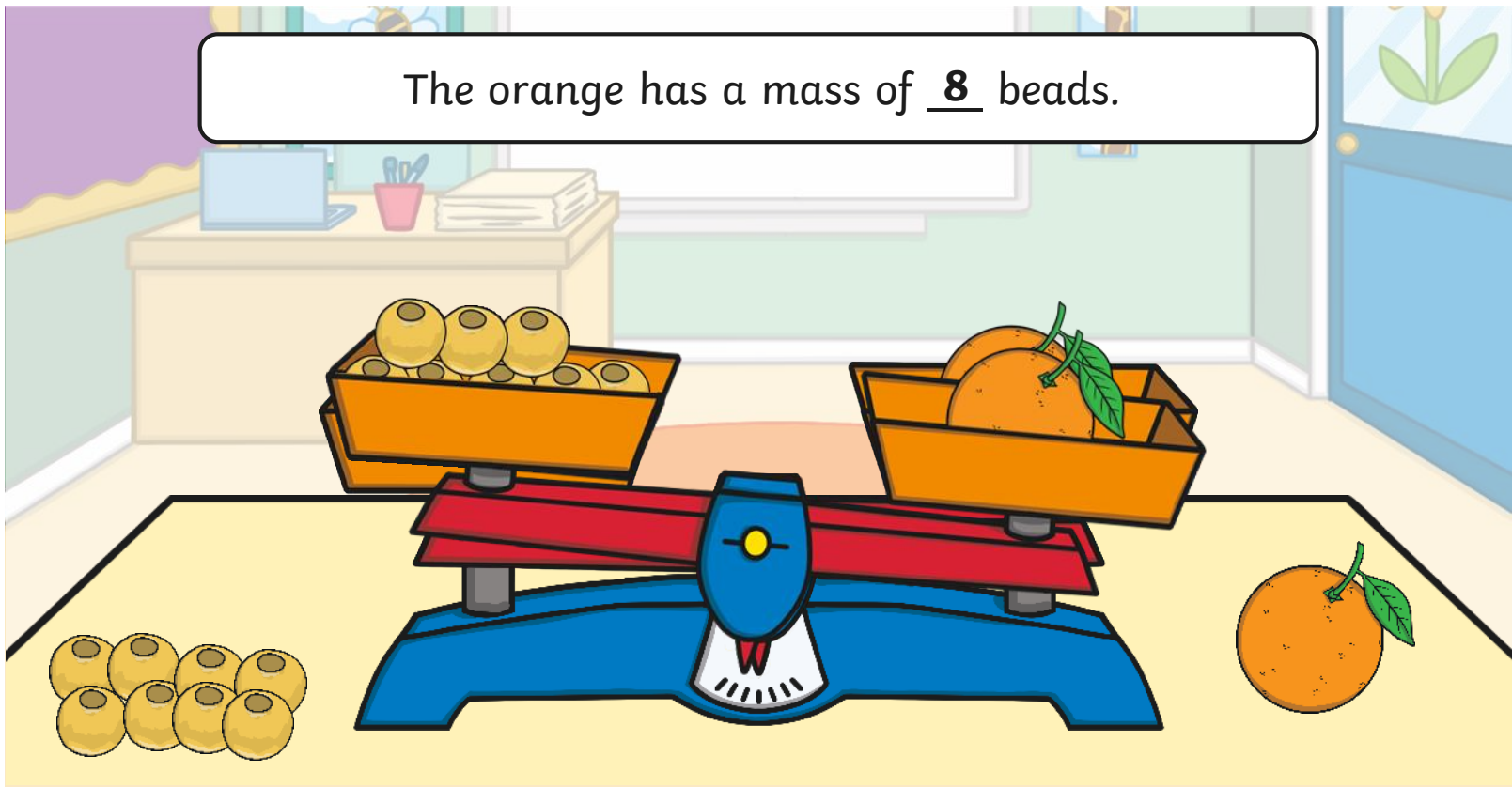
The glue stick has a mass of 3 erasers.

# Measuring Mass with Different Units



What is the mass of the orange?

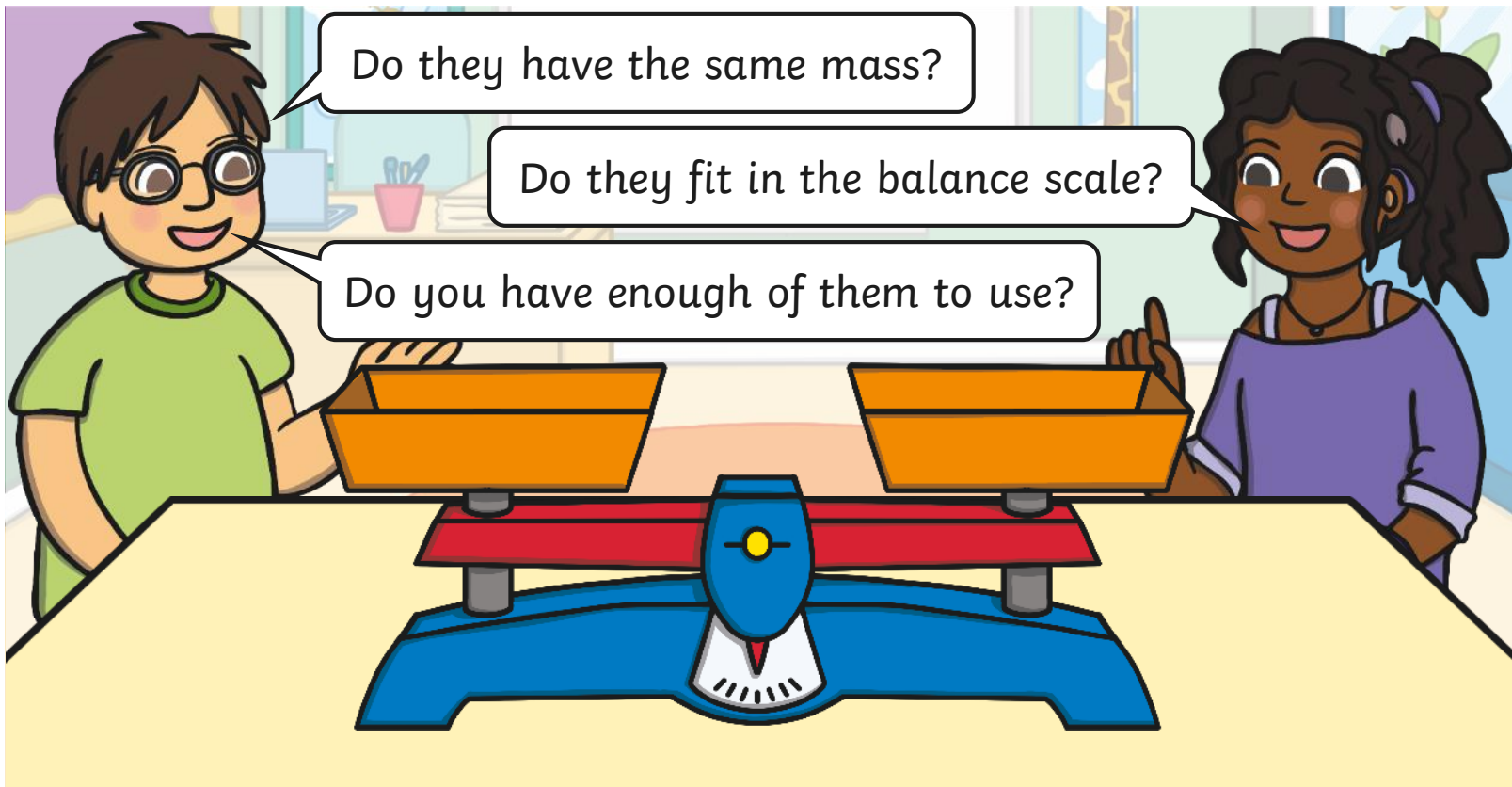
The orange has a mass of 8 beads.



# Measuring Mass with Different Units



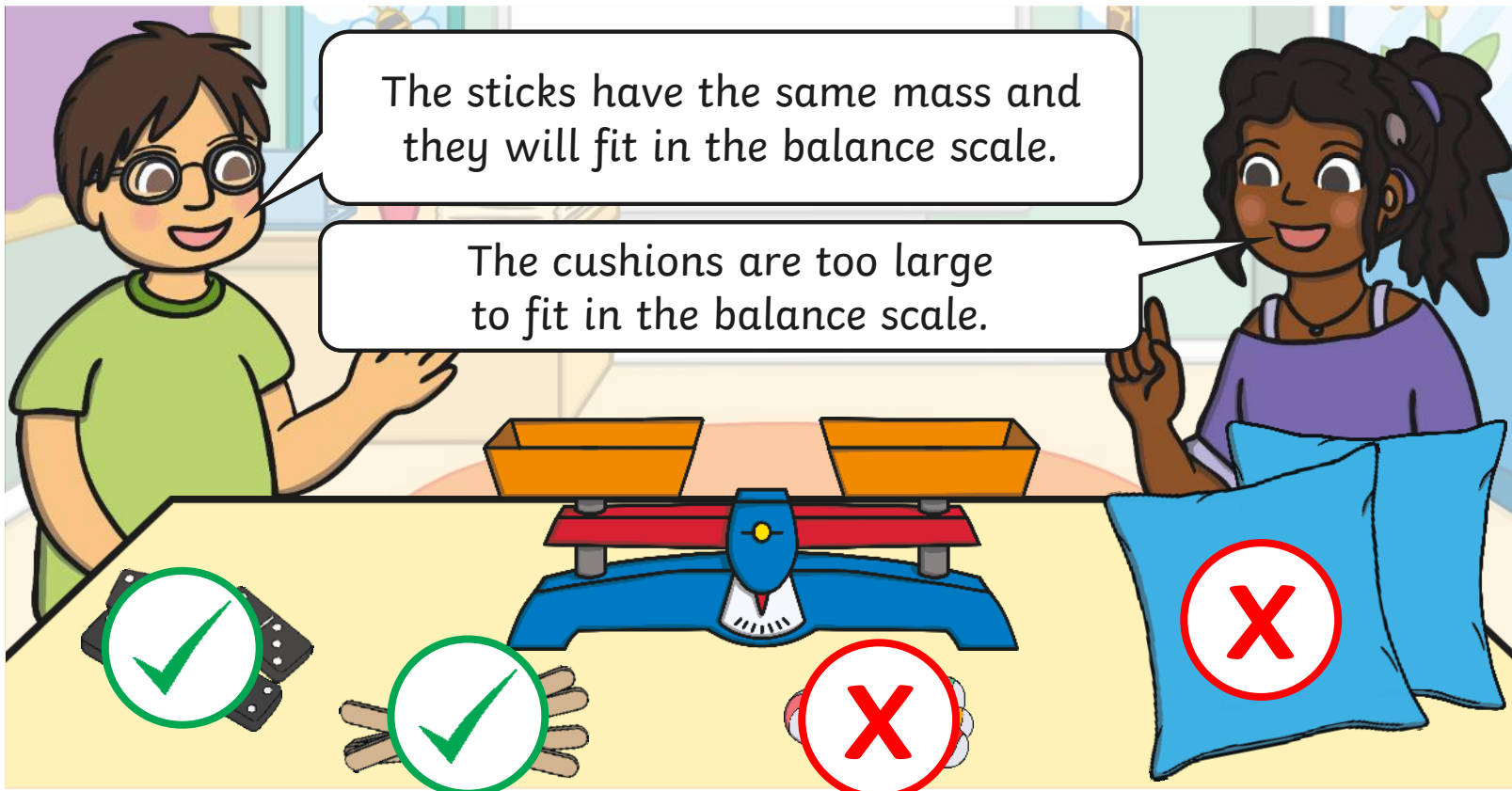
Here are some ideas to think about.



# Measuring Mass with Different Units



Do you think these would be good units of measure? Explain why.



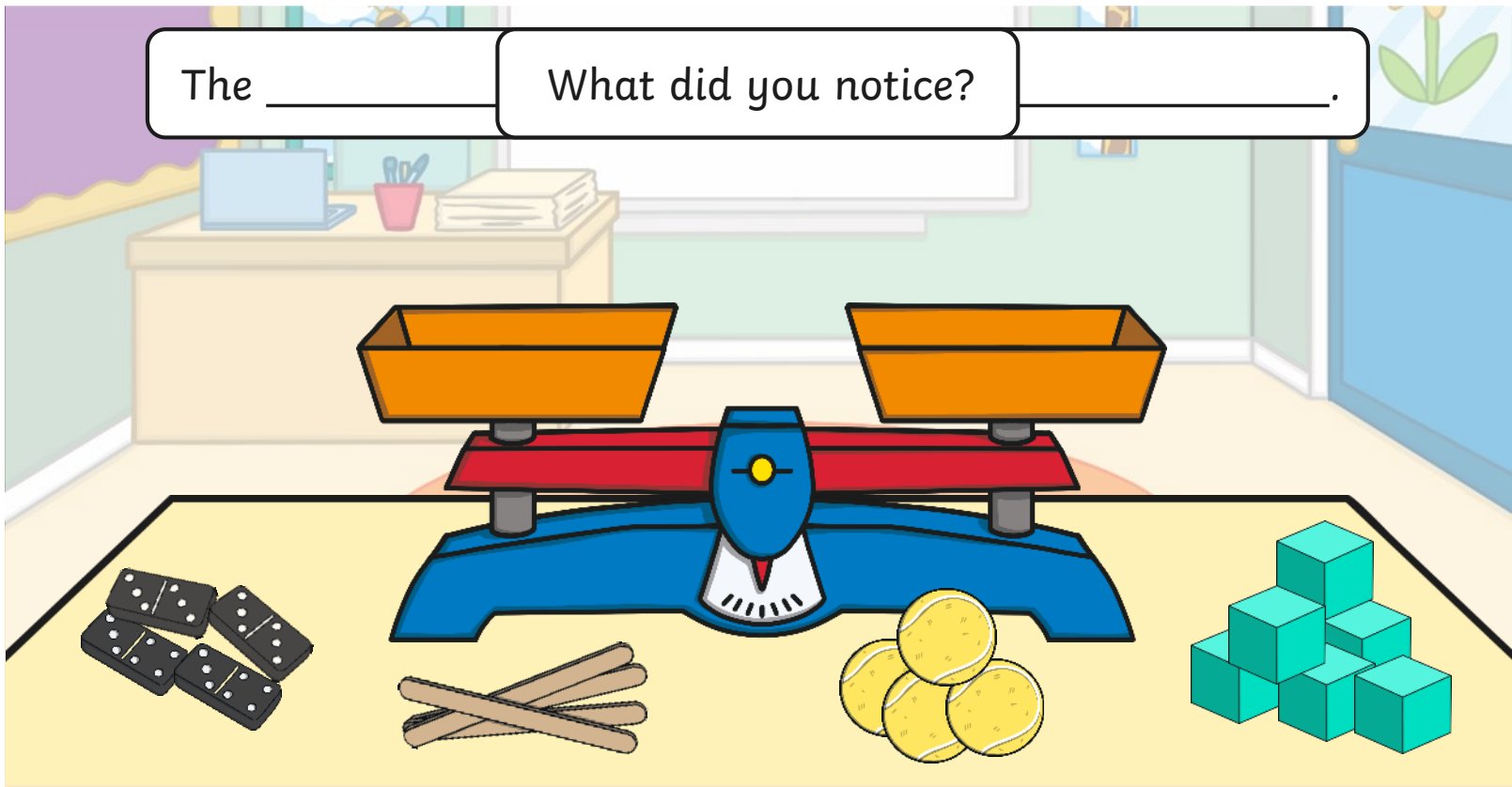
# Try It



Choose a classroom object and use different units to measure its mass.

The \_\_\_\_\_

What did you notice? \_\_\_\_\_.

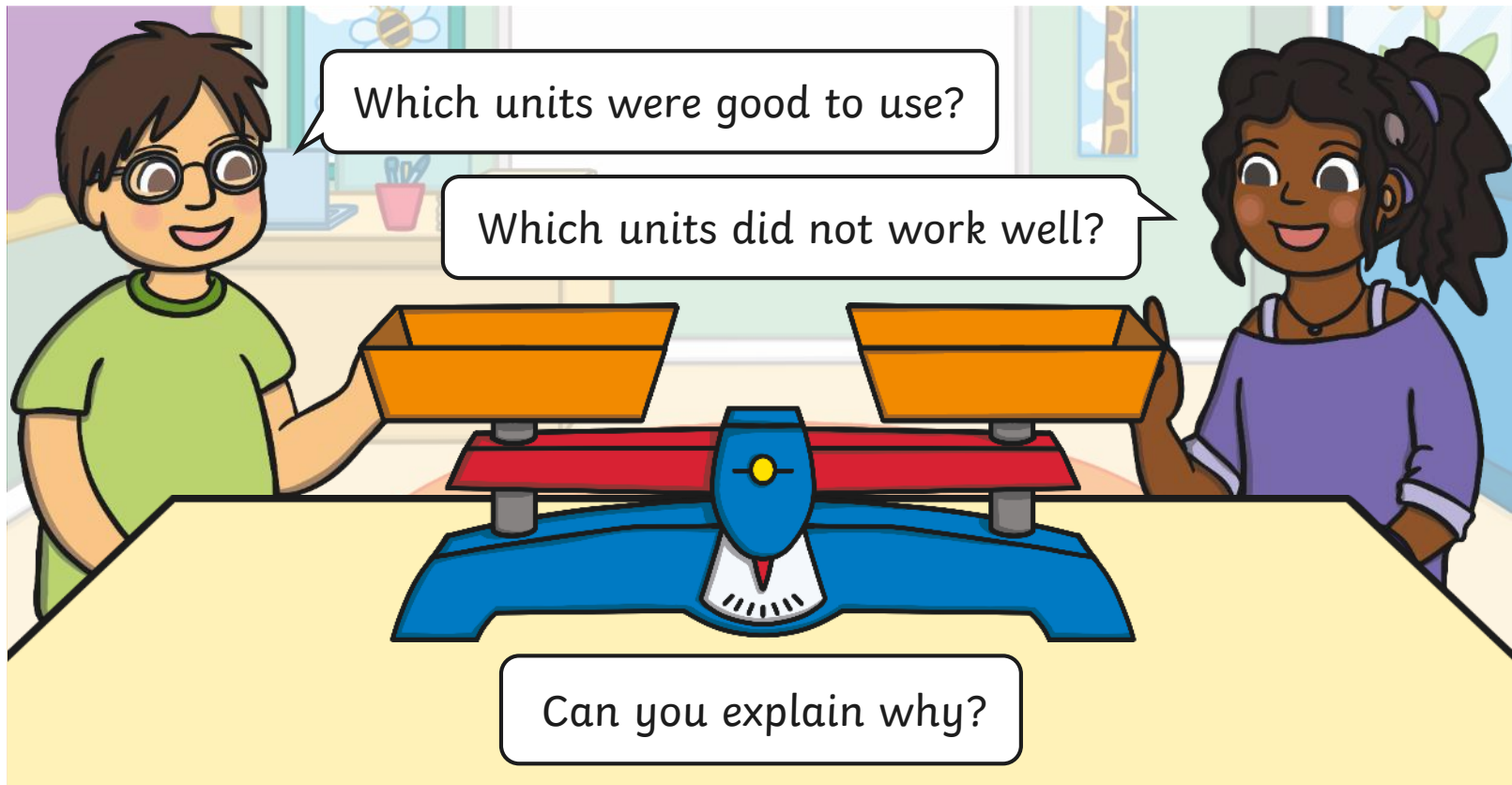




# Try It



Talk to a friend about the units that you have just used to measure mass.



# Try It

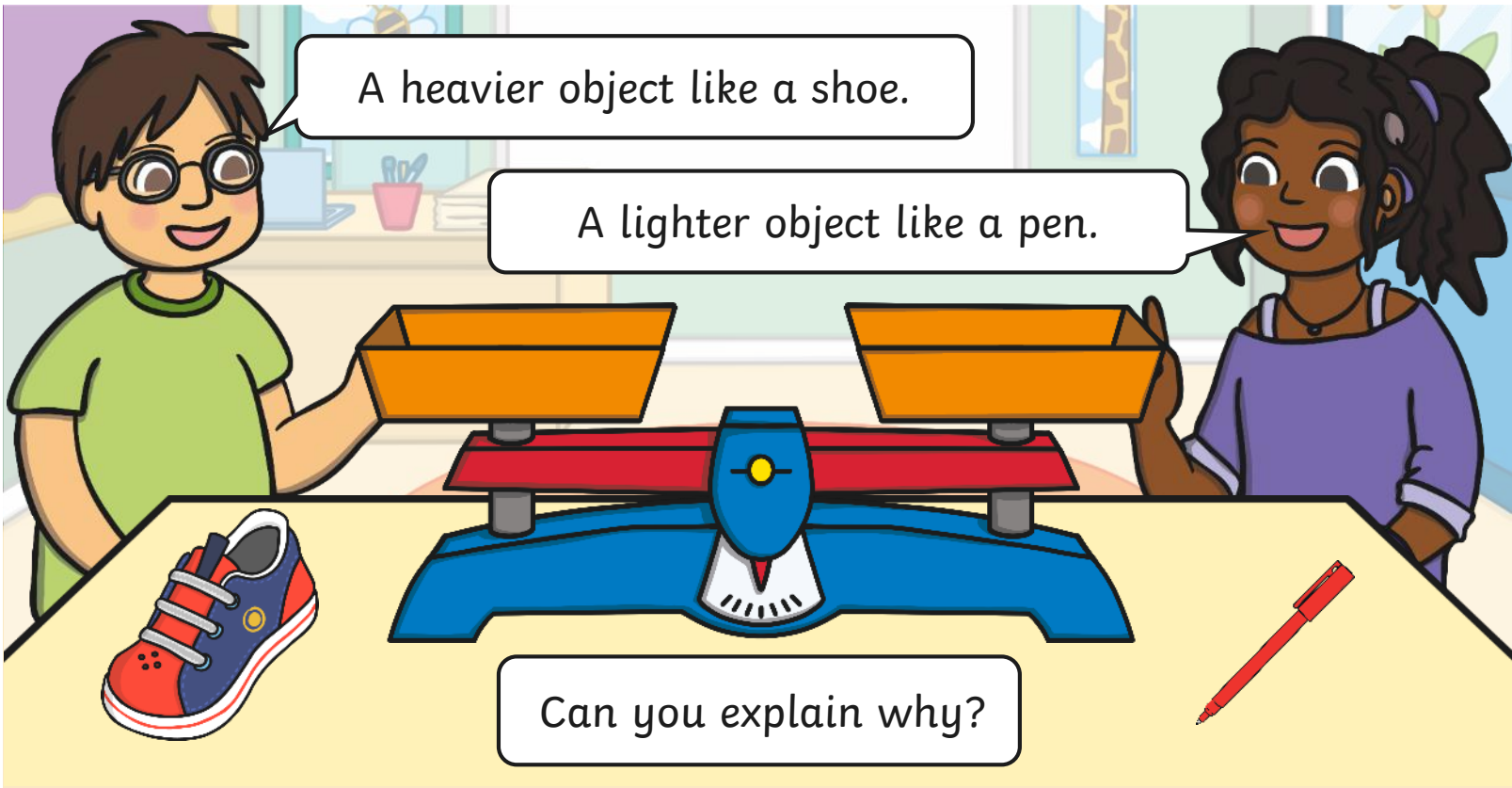


Which units would you use to measure the mass of these objects?

A heavier object like a shoe.

A lighter object like a pen.

Can you explain why?



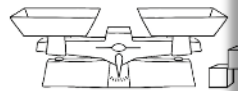
# Measuring Mass



## Measuring Mass

Use blocks to measure the

<b>Object</b>	glue
<b>Number of Blocks</b>	



Which was

The  had

Measure the mass of object

<b>Object</b>	glue
<b>Number of Blocks</b>	
<b>Number of Beads</b>	

Did you use more

## Measuring Mass

### Measuring Mass

I can use non-standard units to measure mass.

Pick a lighter object.



Pick a heavier object.



Choose different units to measure the mass.

<b>Unit</b>	blocks		
<b>Number of Units</b>			

What was the best unit to measure lighter things?

Why?

Choose different units to measure the mass.

<b>Unit</b>	blocks		
<b>Number of Units</b>			

What was the best unit to measure heavier things?

Why?

## Diving into Mastery



Dive in by completing your own activity!



### Measure Mass



The cap has the same mass as \_\_\_\_ cubes.



Choose a toy. How many cubes balances it?



Choose something new to measure your toy with.

Do you need the same amount of them?



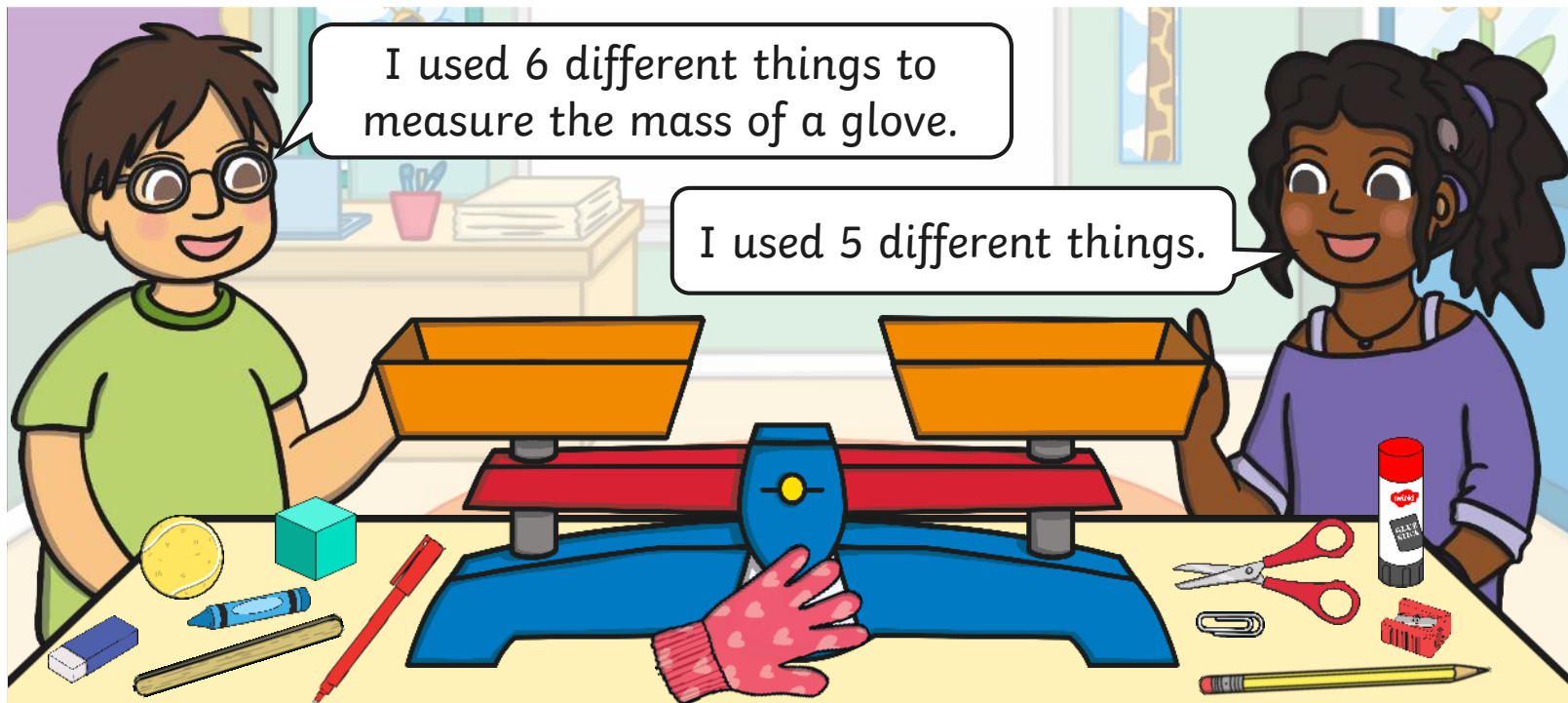
What would you use to find the mass of a full water bottle?



# Check It



Why did they use a different number of objects?



Using 1 kind of unit will help you measure accurately.

# Aim



- To measure mass.

# Success Criteria

- I can use non-standard units to measure mass.
- I can describe measurements of mass.
- I can reason about mass.

