



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 PlanIt Maths steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in which the resources are presented.

Understanding Length and Height (1): Height Comparison
This lesson teaches children to compare the heights of familiar objects. It includes height such as tall, short, taller, shorter, tallest and shortest. The lesson also includes presentation, activity sheets and our fantastic Diving in Mastery Cards that give opportunities for children to apply their learning.

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 Units
Allow children to explore measuring the height of objects using non-standard units. The children then apply this understanding to measuring in the classroom and are encouraged to record the height of various objects within their classroom in a pack also includes our Diving into Mastery Cards that give opportunities for children to apply their learning.

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 toys. They are encouraged to include long, longer, longest, short, shorter and shortest. The lesson includes presentation, activity sheets and our fantastic Diving in Mastery cards that give opportunities for children to apply their learning.

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 measurement 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 wide range of real-life contexts. They also learn to sequence events in chronological order, use 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 length, 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 length, heights, capacities, weights and times using standard and non-standard units;
- know the value of coins and notes;
- sequence familiar 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 a measuring jug;
- reason about measurements to solve practical problems.

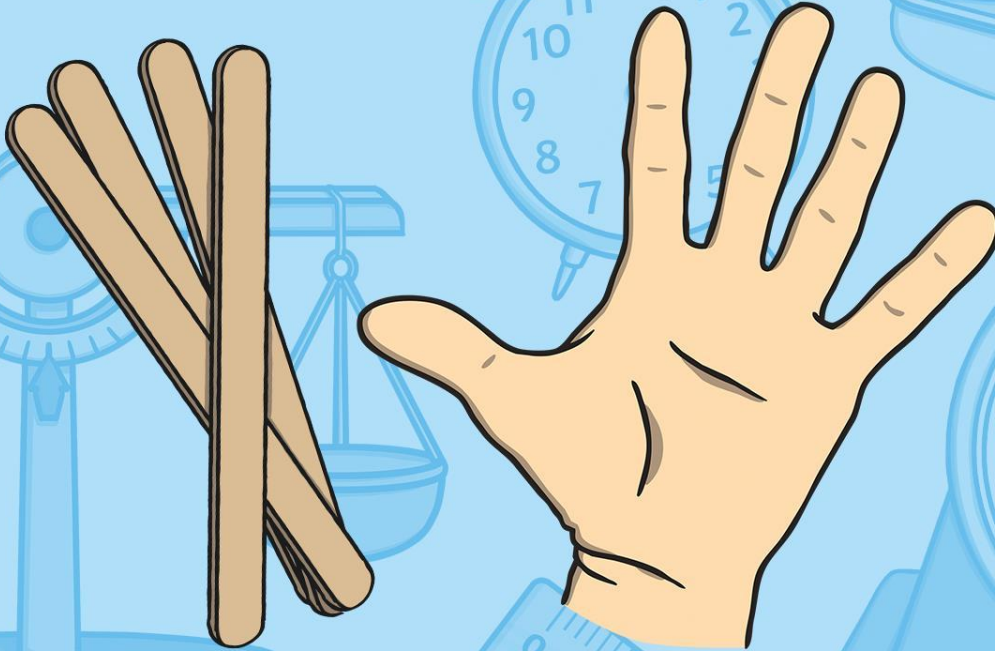
Measurement
Maths 1 Year 1 (Steps to Progression Overview)

The aim of this overview is to support teachers using PlanIt 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 PlanIt Maths. Wherever possible, lesson packs have been matched to each of the small 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
Autumn	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)			Geometry: Shape		Number: Place Value (within 20)		Consolidation		
Spring	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
Summer	Number: Multiplication and Division (Multiples of 2, 5 and 10 to be included)		Number: Fractions		Geometry: Position and Direction	Number: Place Value (within 100)		Measurement: Money	Time		Consolidation	

Measure Height Using Non-Standard Units



Aim

- To measure height using non-standard units.

Success Criteria

- I can accurately measure height using various non-standard units.
- I can record my measurements.

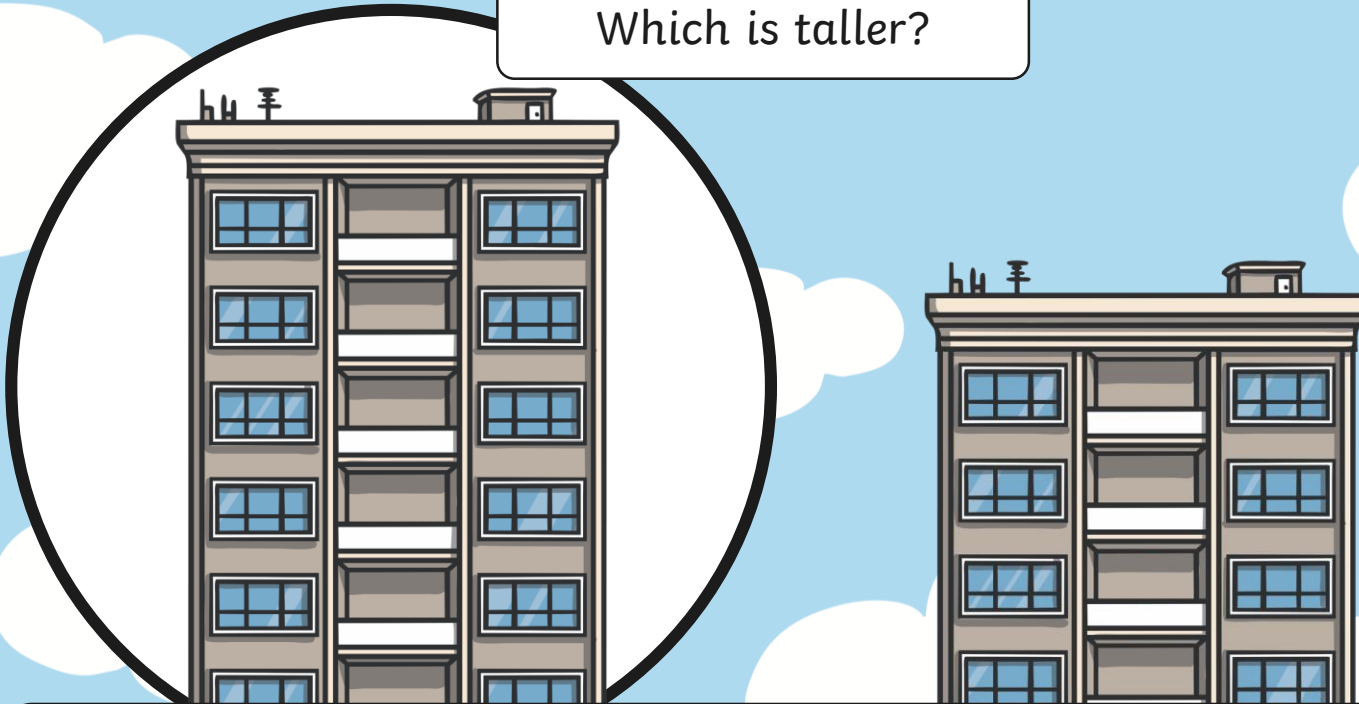
Remember It



Remember It



Which is taller?



The building on the left is **taller** than the building on the right.
The building on the right is **shorter** than the building on the left.

Remember It

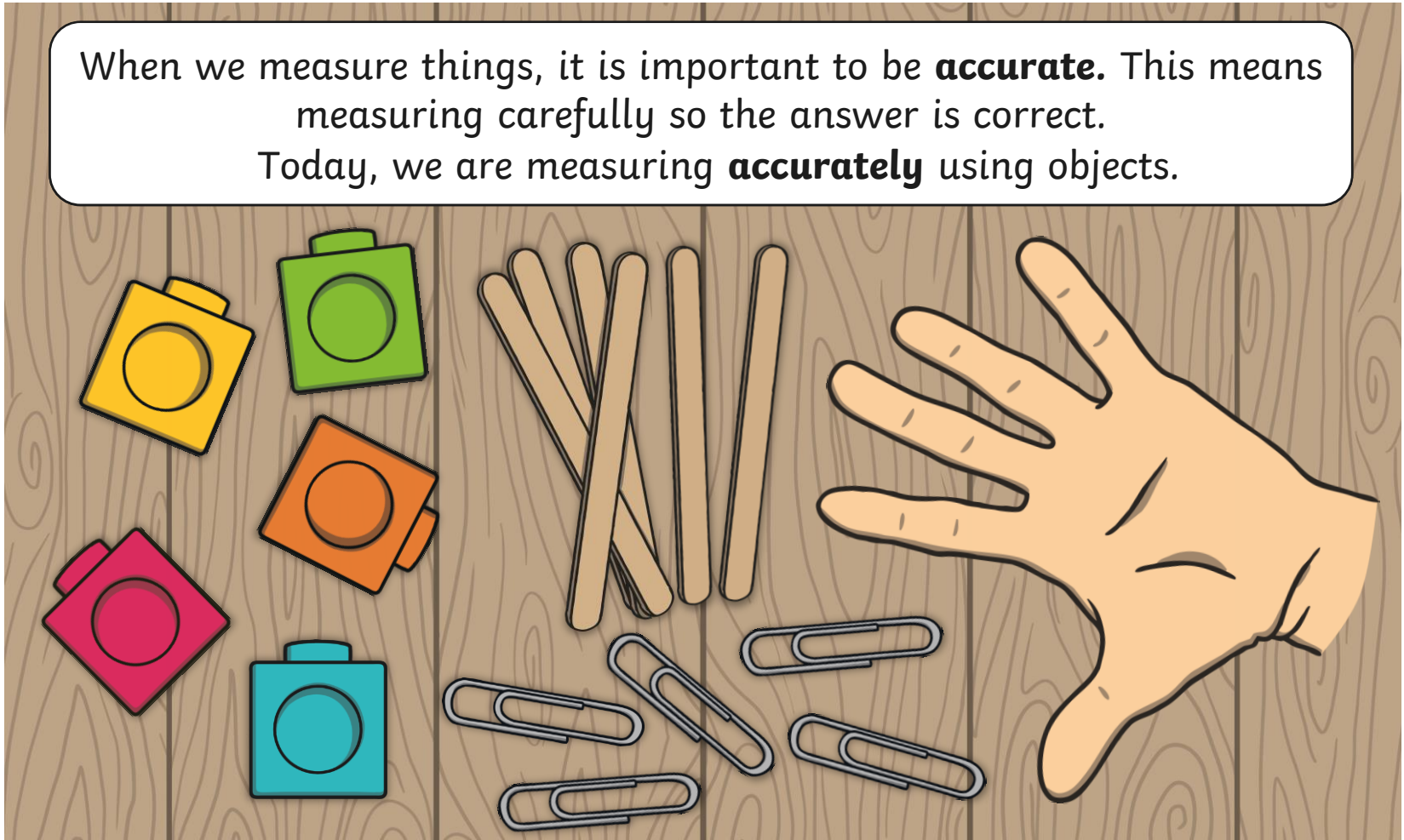


The child is **shorter** than the teacher.
The teacher is **taller** than the child.

Measure It



When we measure things, it is important to be **accurate**. This means measuring carefully so the answer is correct. Today, we are measuring **accurately** using objects.

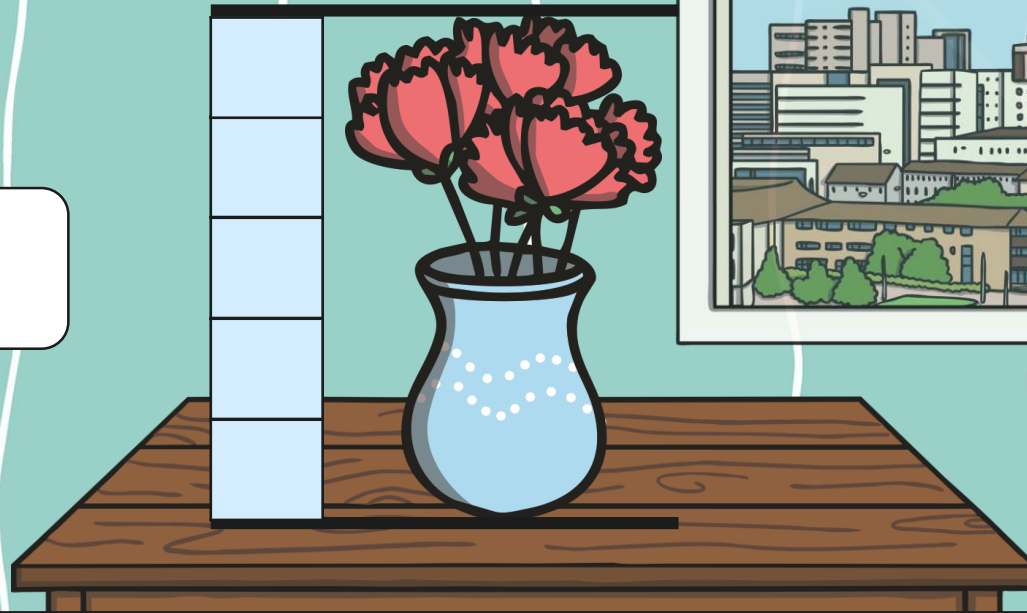


Measure It



How many squares tall do you think this vase of flowers is?

Let's count together.



The vase of flowers is 5 squares tall.

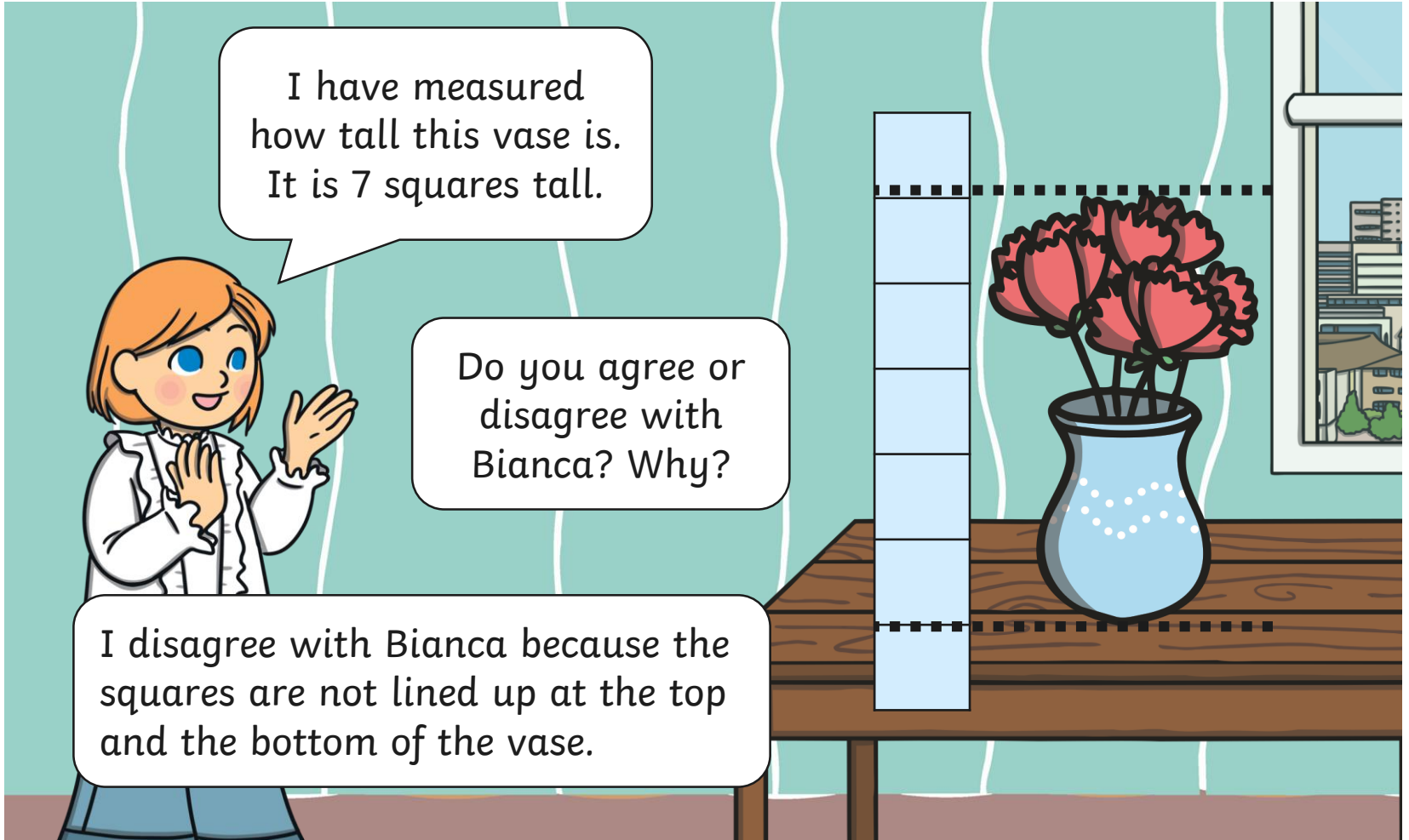
Measure It



I have measured how tall this vase is. It is 7 squares tall.

Do you agree or disagree with Bianca? Why?

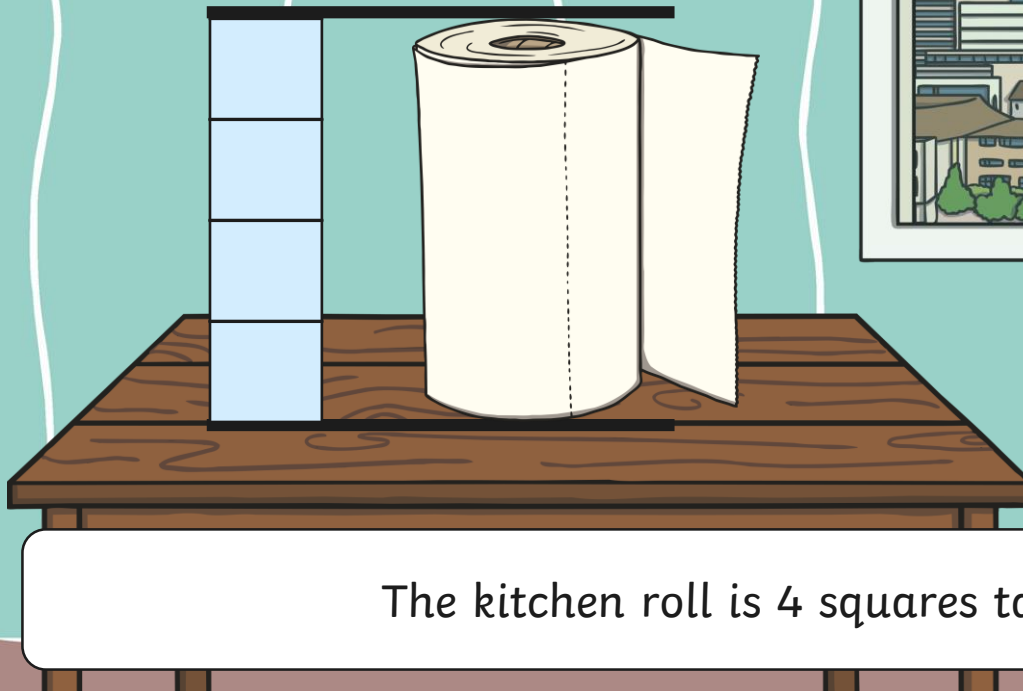
I disagree with Bianca because the squares are not lined up at the top and the bottom of the vase.



Measure It



How many squares tall do you think the kitchen roll is?
Let's count together.



How can we be
accurate when
measuring?

The kitchen roll is 4 squares tall.

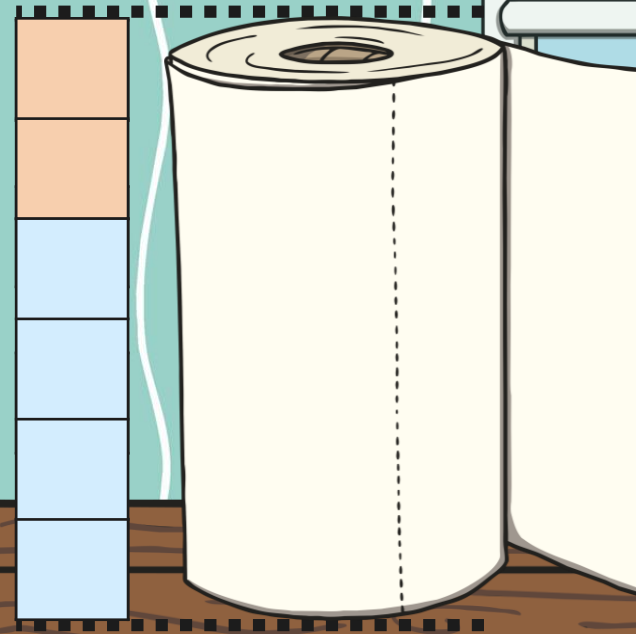
Measure It



I have measured how tall this kitchen roll is. It is 4 squares tall.

Do you agree or disagree with Pietro? Why?

I disagree with Pietro because there are gaps between the squares. This means not all of it has been measured.

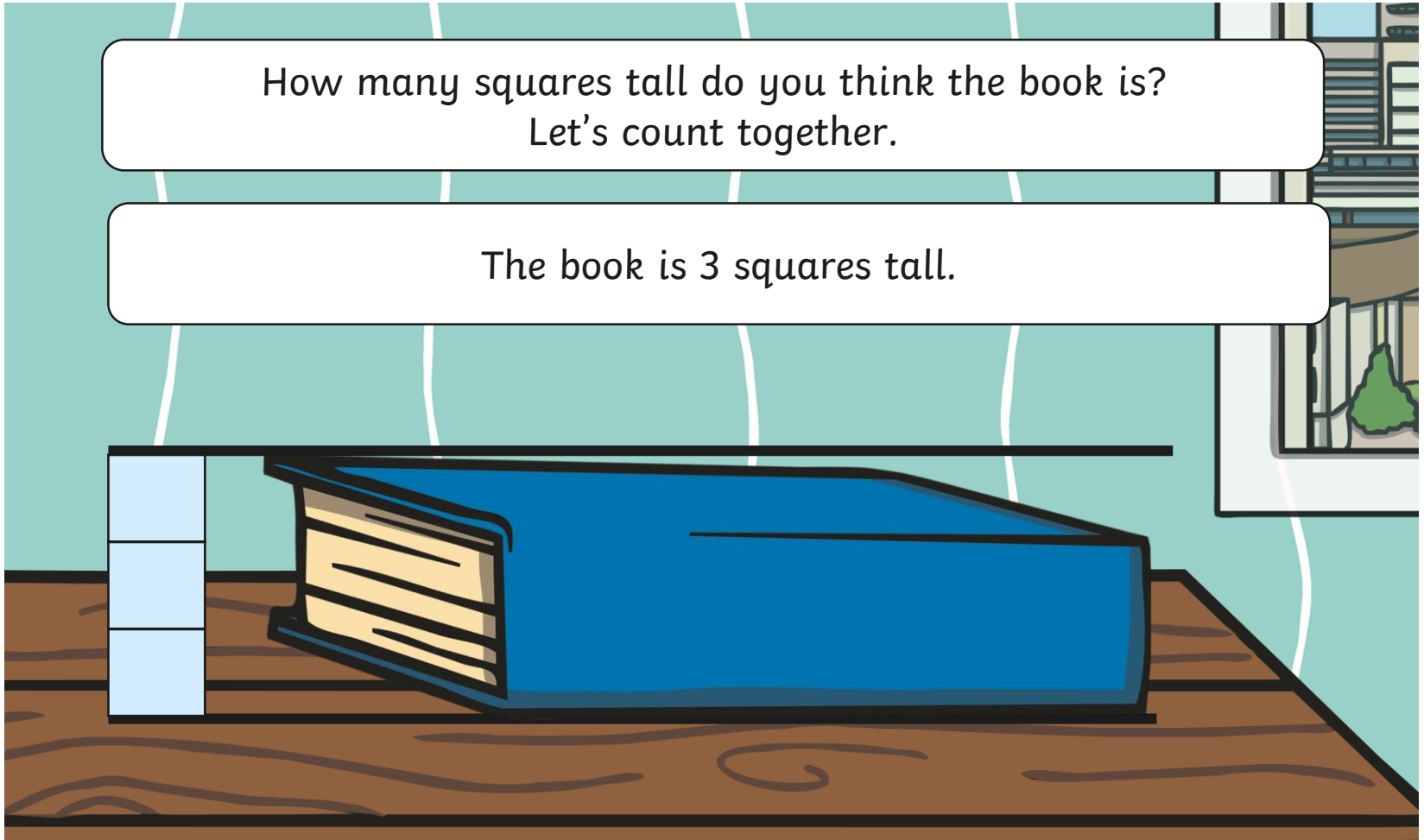


Measure It



How many squares tall do you think the book is?
Let's count together.

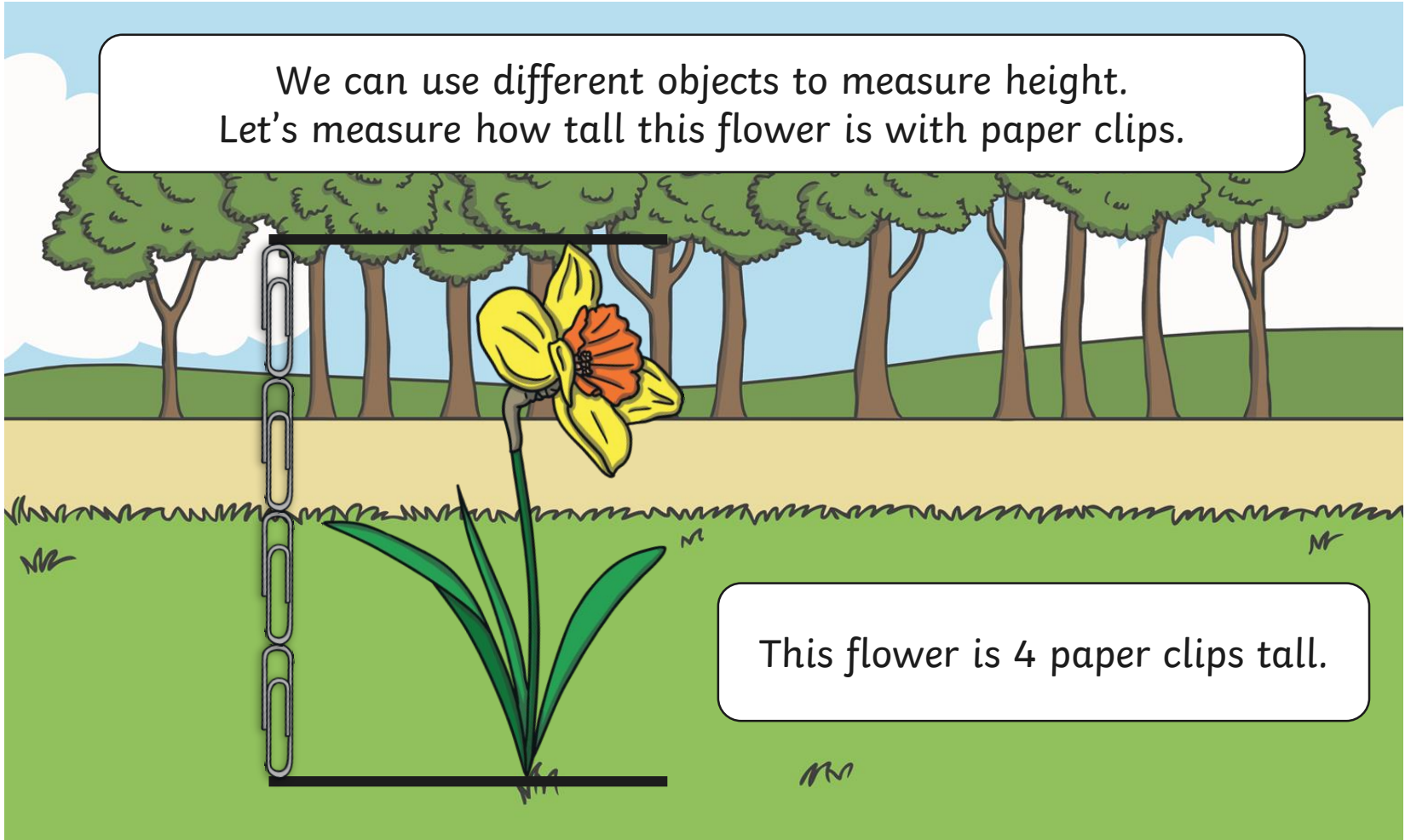
The book is 3 squares tall.



Using Different Units



We can use different objects to measure height.
Let's measure how tall this flower is with paper clips.



This flower is 4 paper clips tall.

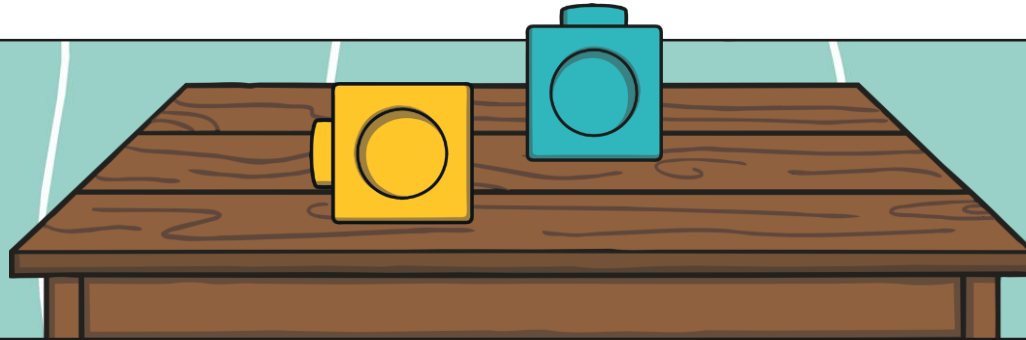
Using Different Units



Let's have a go at measuring the height of a table using cubes.

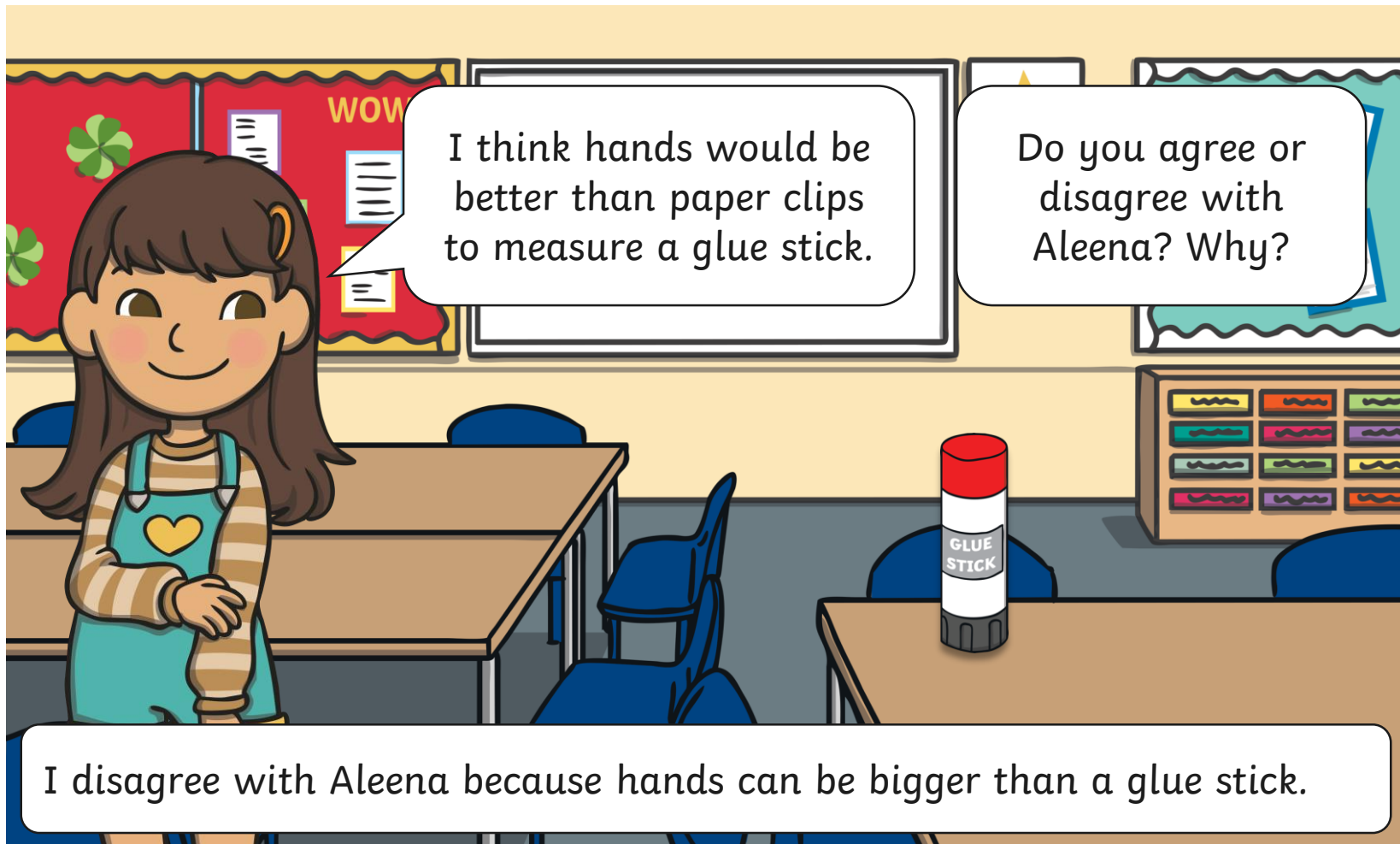
How many cubes do you think it will be?

What did you notice? Was it easy?



It took quite a long time. What objects could we have used to measure with to make it quicker and easier?

Using Different Units



I think hands would be better than paper clips to measure a glue stick.

Do you agree or disagree with Aleena? Why?

I disagree with Aleena because hands can be bigger than a glue stick.

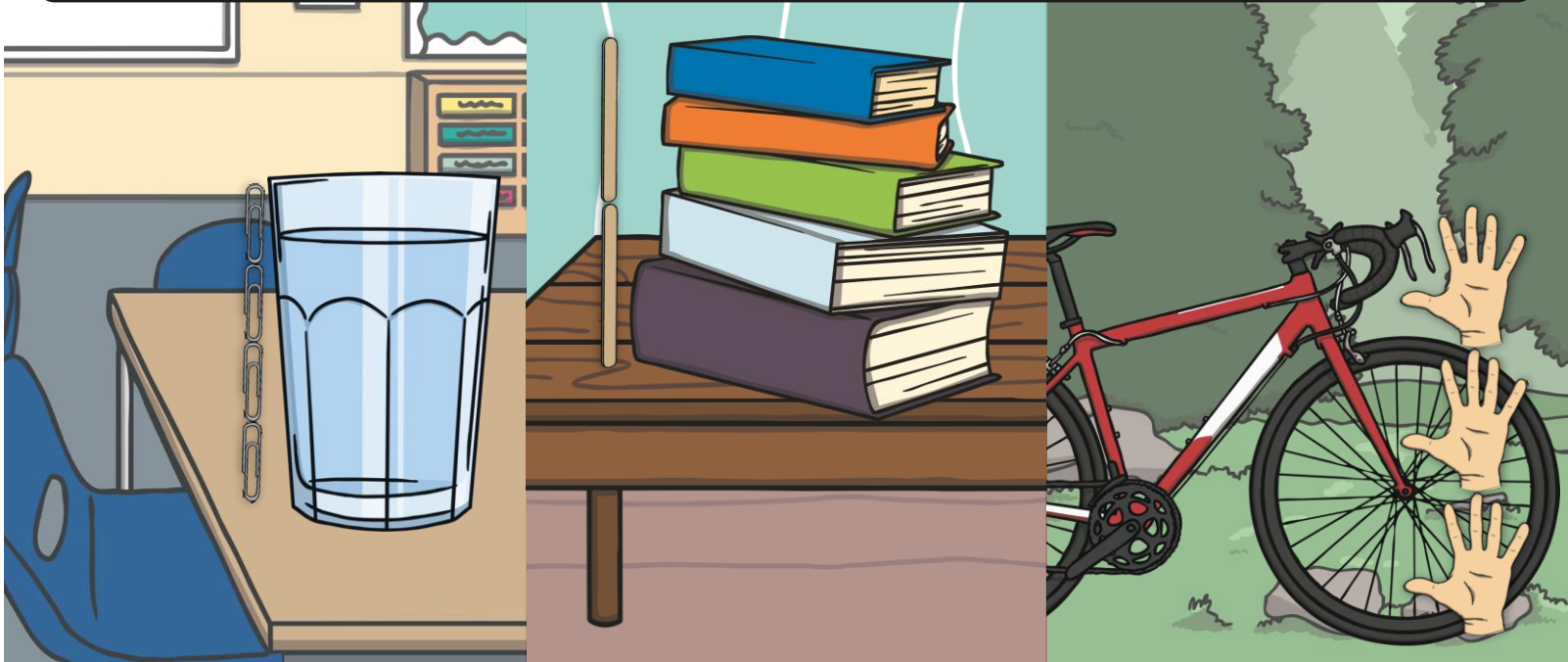
Using Different Units

Can you complete the sentences?

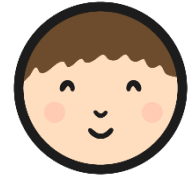


When you measure something small, use a small object.

When you measure something big, use a big object.



How Tall?



How Tall?

To measure the height of objects using non-standard units.

Use the cubes to measure the height of these pictures.
Record the measurement on the answer line.



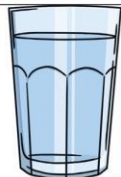
_____ cubes tall.



_____ cubes tall.



_____ cubes tall.



_____ cubes tall.



_____ cubes tall.

_____ cubes tall.
Record the height of these pictures.



_____ paperclips tall.



_____ paperclips tall.

_____ paperclips.

How Tall?

Record the height of these pictures.

_____ cubes tall.
Record the height of these pictures with.



_____ paperclips tall.

How Tall?

Record the height of these pictures with.

Diving into Mastery

Dive in by completing your own activity!



Measuring Height with Non-Standard Units.

Tick the flower that is 3 lolly sticks tall.

Tick the flower that is 3 lolly sticks tall.

Use paper clips to measure the height of classroom objects.

Aim



- To measure height using non-standard units.

Success Criteria

- I can accurately measure height using various non-standard units.
- I can record my measurements.

