

Disclaimer/s

We hope you find the information on our website and resources useful.

Animations

This resource has been designed with animations to make it as fun and engaging as possible. To view the content in the correct formatting, please view the PowerPoint in 'slide show mode'. This takes you from desktop to presentation mode. If you view the slides out of 'slide show mode', you may find that some of the text and images overlap each other and/or are difficult to read.

To enter slide show mode, go to the **slide show menu tab** and select either **from beginning** or **from current slide**.



Maths

Measurement

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

The image shows three overlapping documents from Twinkl Planit. The leftmost document is 'Lesson Breakdown' for 'Money', detailing lessons like 'The Coin Collector', 'Show Me the Money', and 'The Coin Exchange'. The middle document is 'Introduction' for 'Measurement', listing resources and assessment statements. The rightmost document is 'Measurement Steps to Progression Overview', a grid showing the sequence of topics across 12 weeks, categorized by seasons (Autumn, Spring, Summer).

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 the scheme.

Money (1): The Coin Collector

This metal detecting-themed lesson teaches children to recognise coins through a fun 'Snag' and board game. Children learn to compare money and make different money totals. They also learn facts about time, compare and order time intervals and tell the time on an analogue clock to the nearest five minutes.

Please note: this content is being updated for 2021. For now, please use the current version.

NC Statement: Recognise and use symbols for pounds (£) and pence (p).

Money (2): Show Me the Money

This lesson focuses on finding the right combination of coins to make a given amount. Children learn to count money to find a total and select money to make a given amount.

Please note: this content is being updated for 2021. For now, please use the current version.

NC Statement: Combine amounts to make a particular value.

Combination of Coins (1): The Coin Exchange

This fun lesson allows children to use their knowledge of multiples to count money. Children are challenged to investigate how many different ways they can make a given amount of money using different coins.

Please note: this content is being updated for 2021. For now, please use the current version.

NC Statement: Find different combinations of coins that equal the same amounts of money.

Introduction

This unit will further develop children's concept of measurement in length and height, capacity, weight, money and time. The children use standard units of measure and apply their skills of measuring and recording in a wide range of familiar contexts. They learn the vocabulary they will need to compare and order measurements and develop their reasoning skills through solving practical problems. Children learn the symbols for pounds and pence and make different money totals. They also learn facts about time, compare and order time intervals and tell the time on an analogue clock to the nearest five minutes.

Resources

- Measuring tools including rulers, scales, thermometers and measuring vessels
- Clocks
- Coins

Assessment Statements

By the end of this unit:

children working towards the expected level will be able to:

- use standard units to estimate and measure length/height (cm/m), mass (g/kg), temperature (°C), capacity (litres/ml) accurately;
- compare and order length, mass, volume/capacity using the language more than, less than and equal to;
- read scales on rulers, scales, thermometers, and measuring vessels in divisions of ones;
- recognise the symbols for pounds (£) and pence (p) and know the value of different coins;
- solve simple, practical one-step measurement problems with all four operations.

children working at the expected level will be able to:

- use standard units to estimate and measure length/height (cm/m), mass (g/kg), temperature (°C), capacity (litres/ml) to the nearest accurate unit;
- compare and order length, mass, volume/capacity using the symbols >, = and <;
- read scales on rulers, scales, thermometers, measuring vessels in divisions of ones, tens and hundreds;
- recognise the symbols for pounds (£) and pence (p) and use different coins to make the same amount;
- read and write the time on an analogue clock to the nearest 5 minutes;
- know there are sixty minutes in one hour and twenty-four hours in one day;

Measurement

Maths | Year 2 | 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

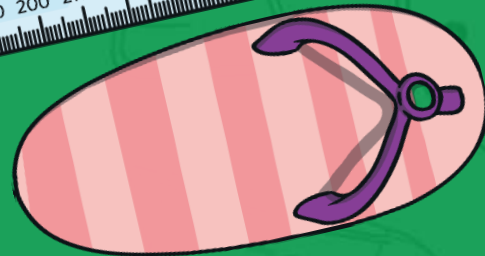
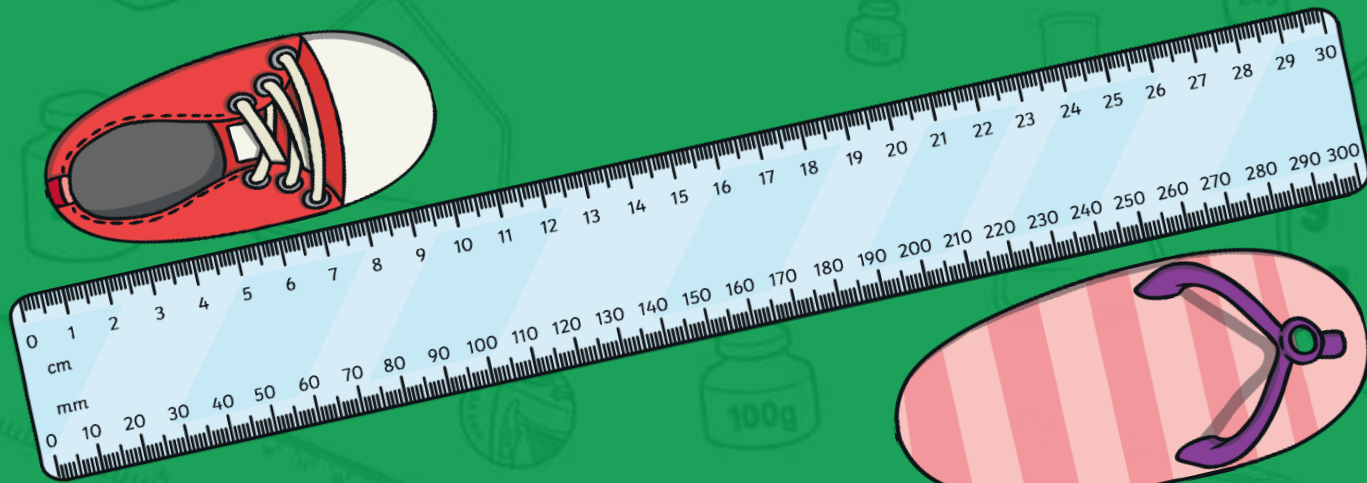
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition and Subtraction			Measurement: Money		Number: Multiplication and Division				
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shape			Number: Fractions		Measurement: Length and Height		
Summer	Position and Direction		Problem Solving and Efficient Methods		Measurement: Time		Measurement: Mass, Capacity and Temperature		Investigations			

See our [Measurement Steps to Progression](#) document.

Twinkl Planit is our award-winning scheme of work with over 4000 resources.



Measuring Length in Centimetres



Aim

- To measure length to the nearest centimetre.

Success Criteria

- I can use a ruler to measure accurately.
- I can measure to the nearest centimetre.

Remember It

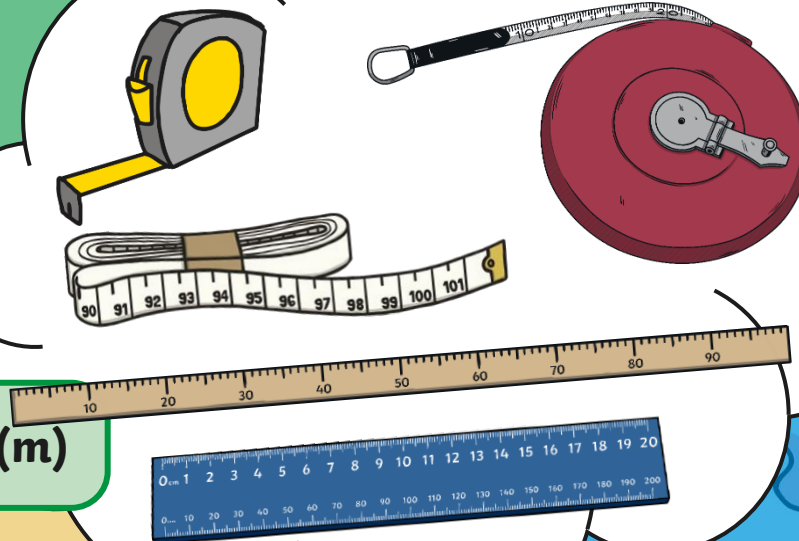
What tools can we use to measure **length** or **height**?

Think of as many as you can.

What units do we use to measure **length** or **height**?

centimetres (cm) and metres (m)

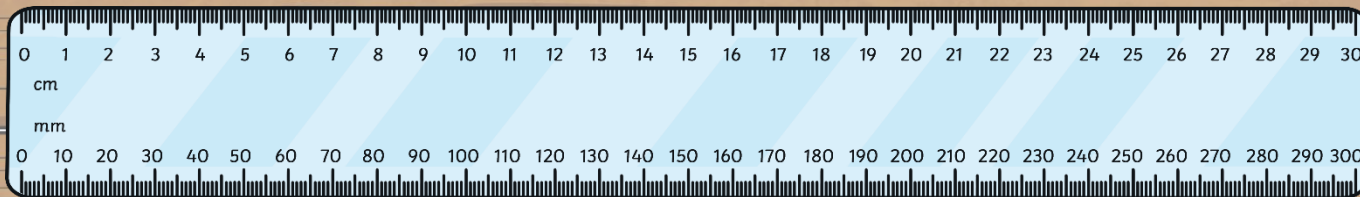
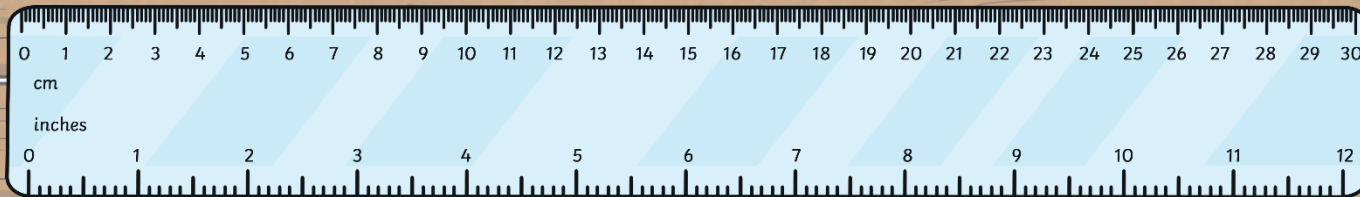
Why is it important that we all use the same units of measurement?
Explain to your partner.



Using a Ruler

Here are some types of 30cm rulers.

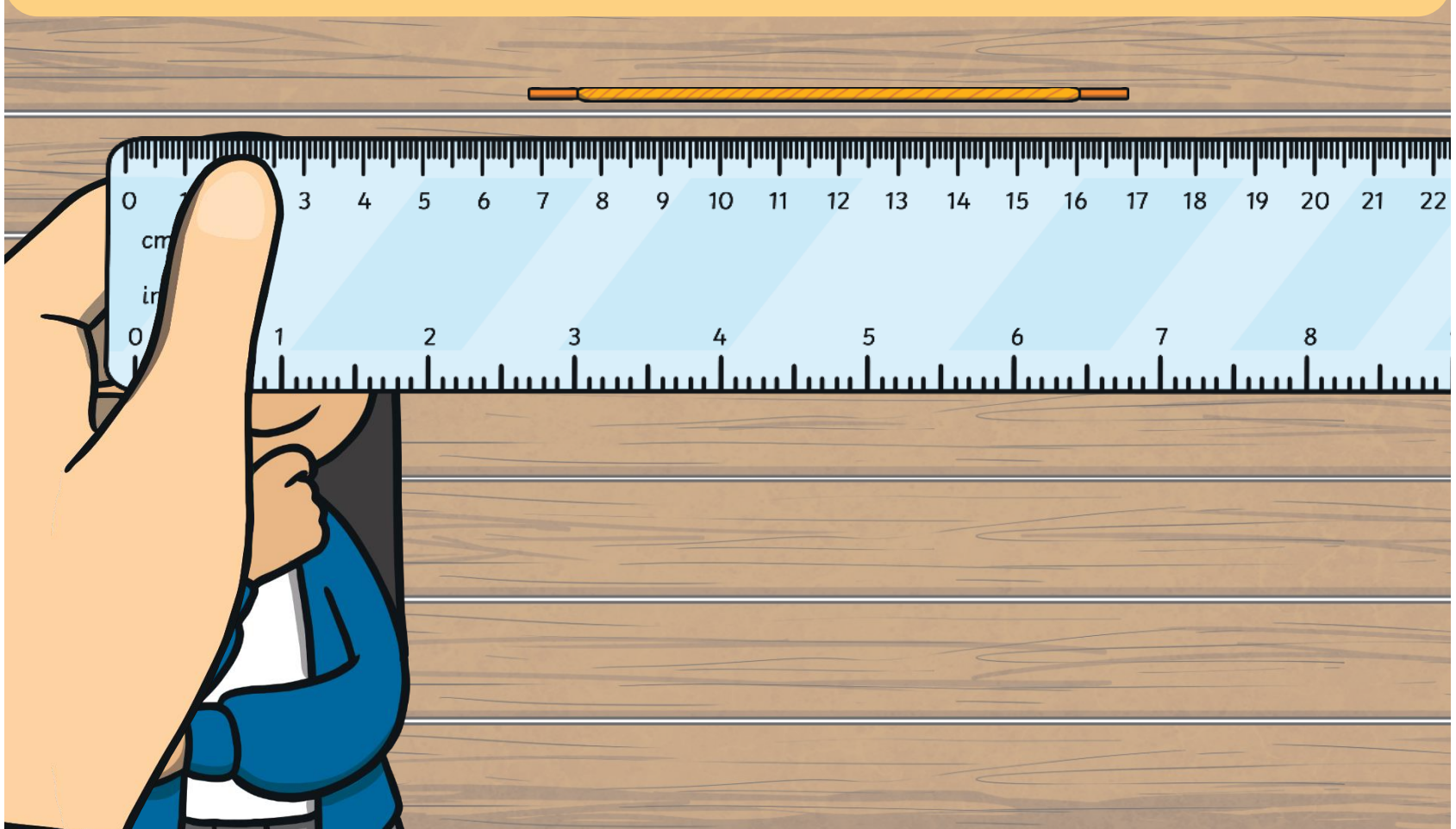
How are they the same? How are they different?



Investigate your ruler. Does it look like one of these or is it different?

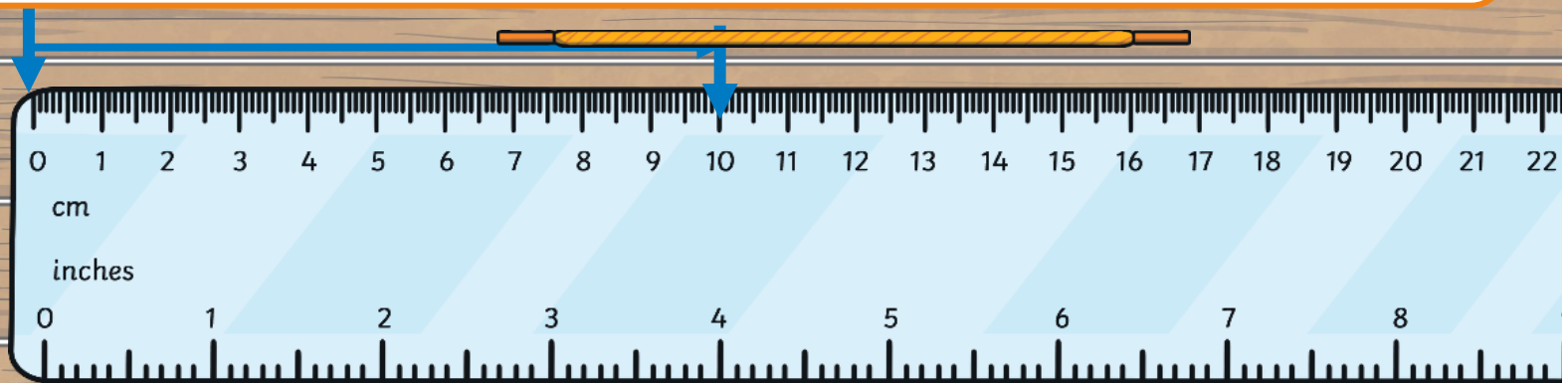
Using a Ruler

Let's remind ourselves how to measure the **length** of an object step by step, by measuring this shoelace.



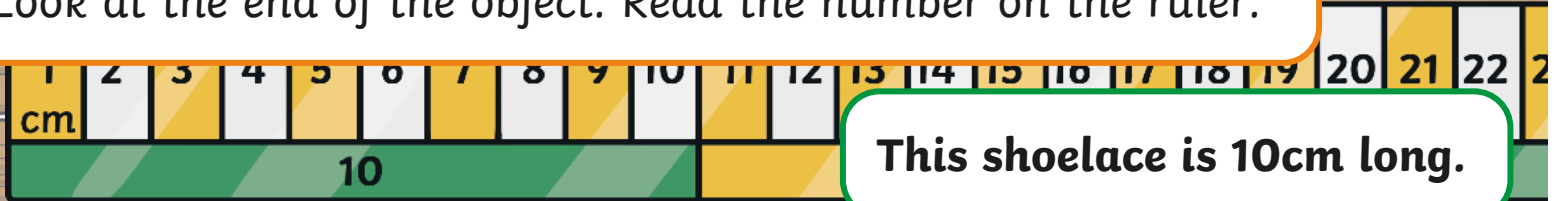
Using a Ruler

1. Make sure the object you are measuring is lined up either with zero or the end of your ruler (if that represents zero).



2. Make sure the object is straight and lined up along the ruler.

3. Look at the end of the object. Read the number on the ruler.

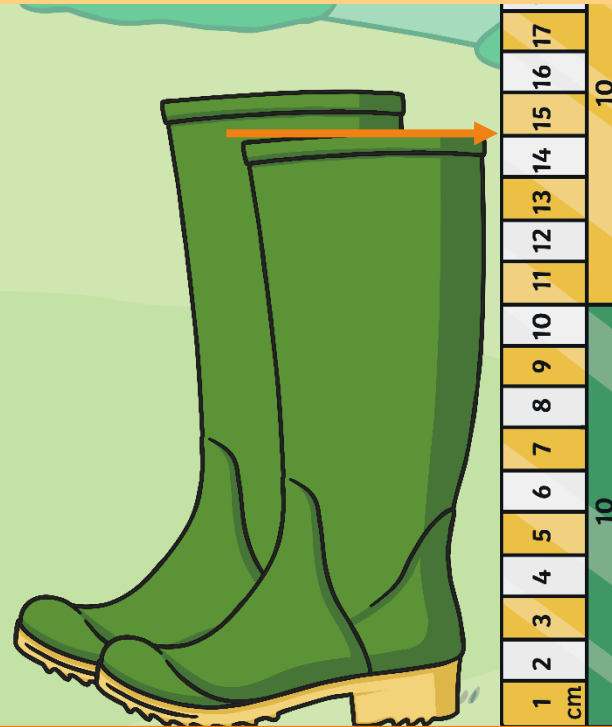


Using a Ruler

You can also use a ruler to measure how **tall** something is, like this welly.

How tall is the welly?

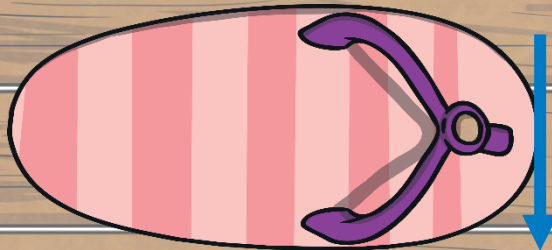
14cm



But if you can, you might find it easier to lie the object down on a table and measure it that way.

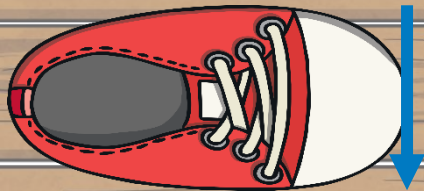
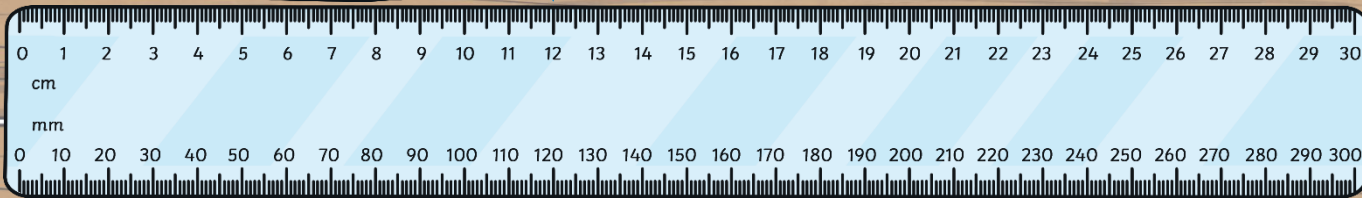
Shoe Sizes

Practise reading the scales to measure the lengths of the children's shoes.



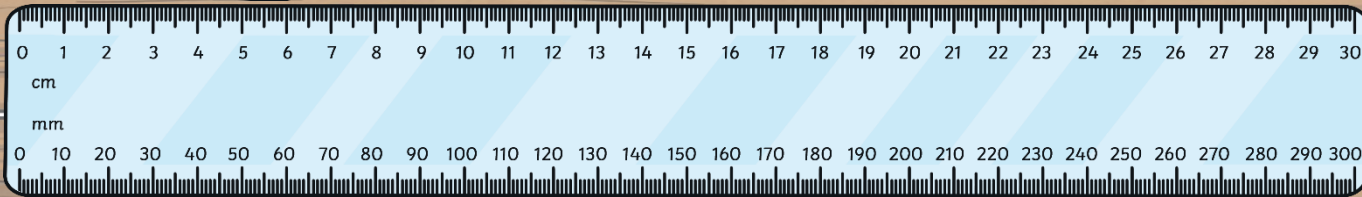
12cm

Click here to reveal the answer.



9cm

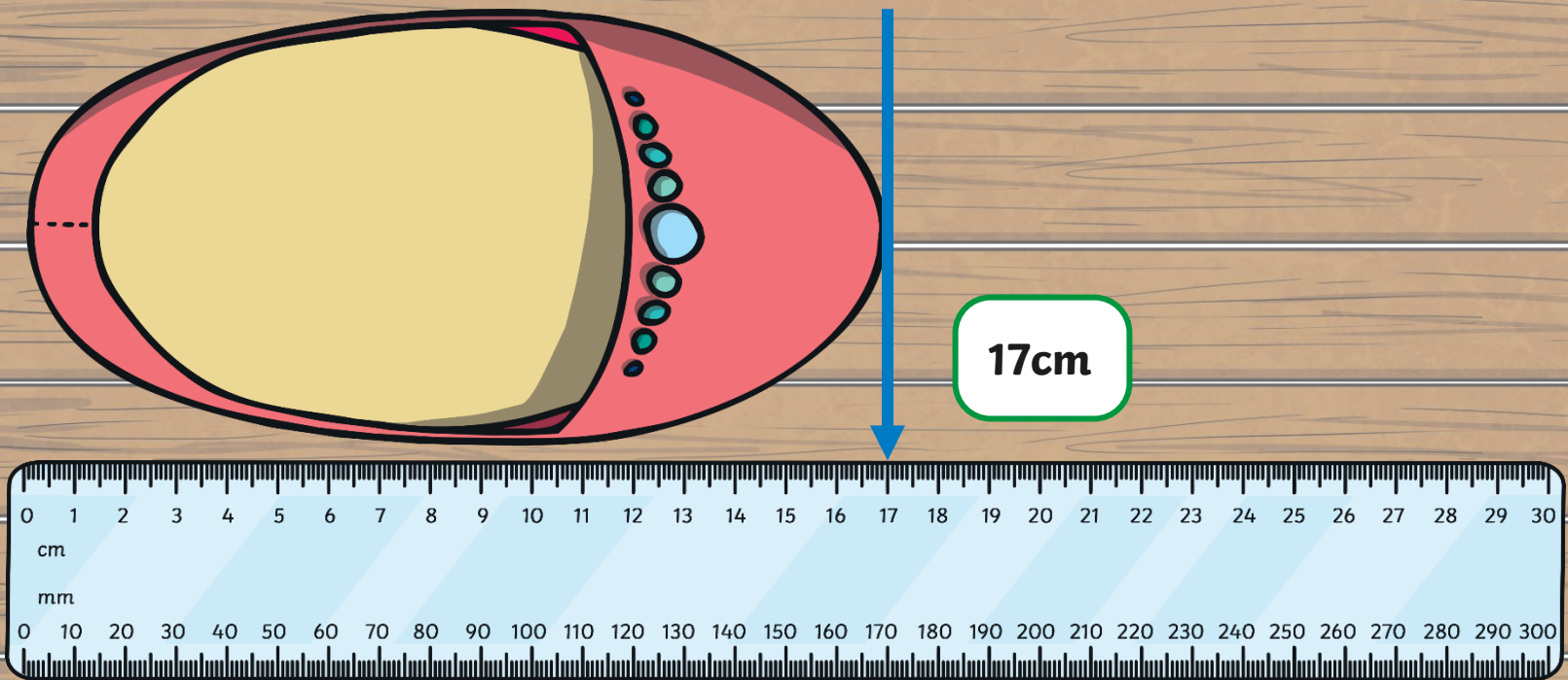
Click here to reveal the answer.



Shoe Sizes

Practise reading the scales to measure the lengths of the children's shoes.

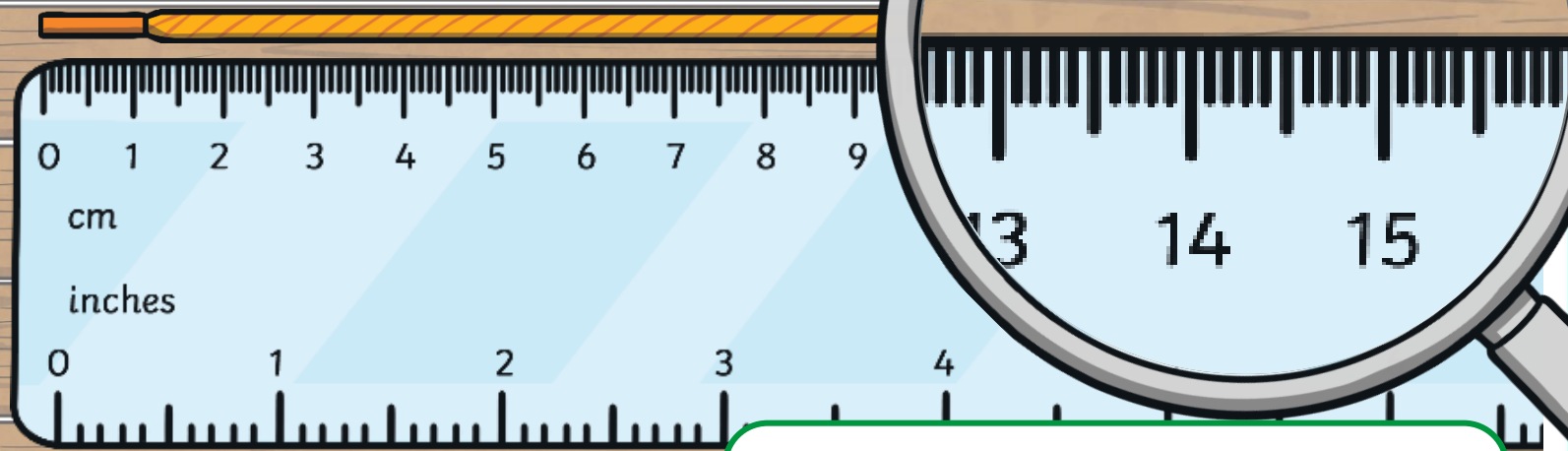
Click here to reveal the answer.



The Nearest Centimetre

Some objects we measure will not be an exact number of centimetres. When this happens, we can measure to the nearest centimetre.

Let's have a close look at the length of this string.



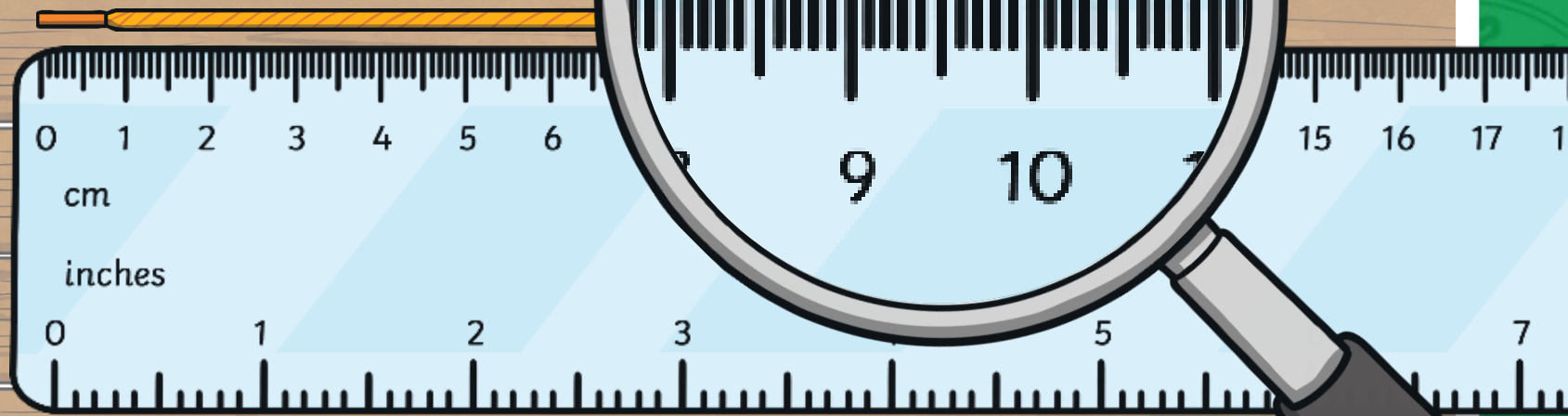
The lace is **closer** to 14cm than 15cm.

To the nearest centimetre, it is **14cm** long (even though it is a little more than 14cm).

The Nearest Centimetre

Some objects we measure will not be an exact number of centimetres. When this happens, we can measure to the nearest centimetre.

How long is this lace?



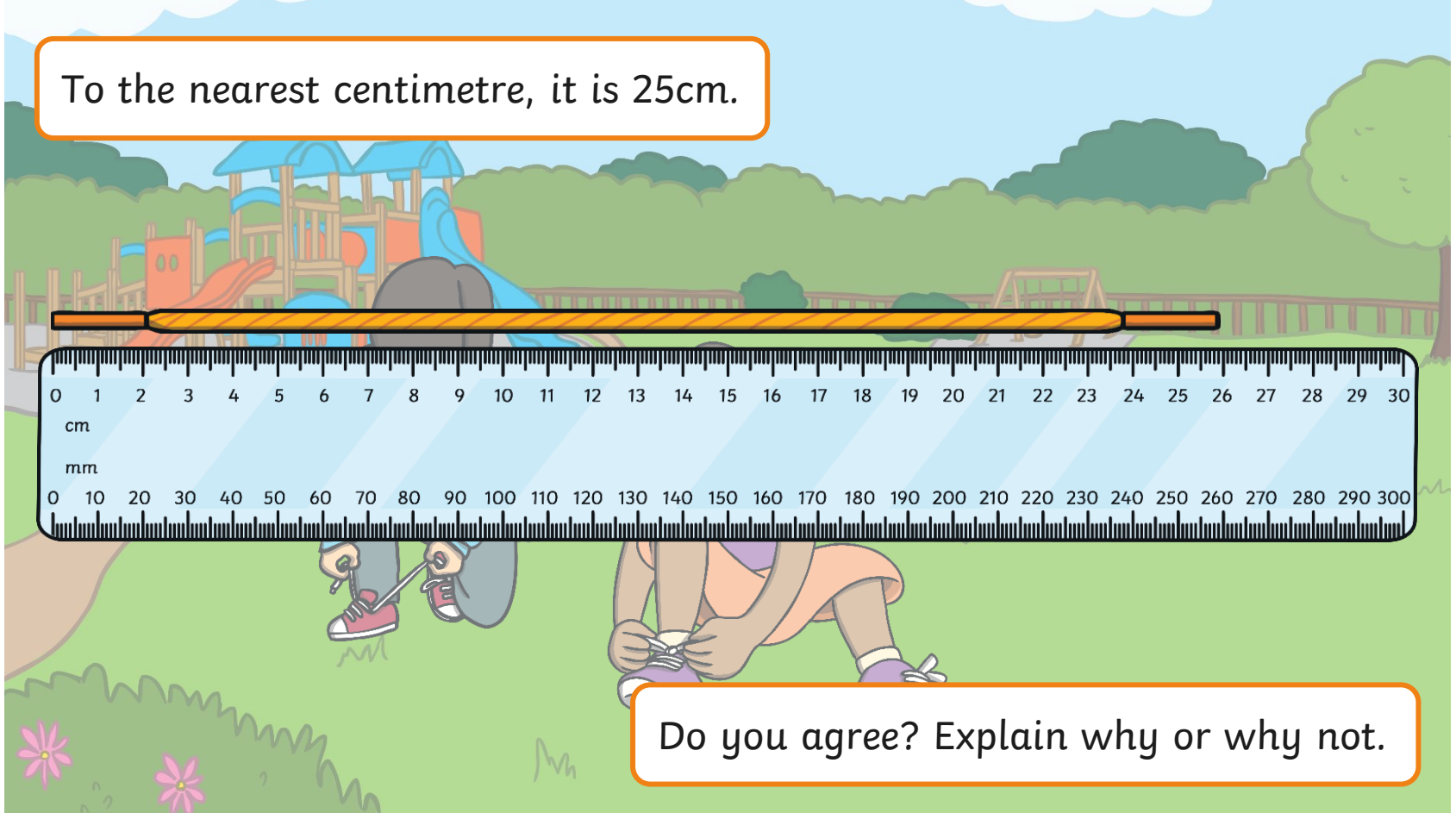
The lace is **closer** to 10cm than 9cm.

To the nearest centimetre, it is **10cm** long (even though it doesn't quite reach 10cm).

Measurement Challenge

Franz has measured his shoelace to the nearest centimetre.

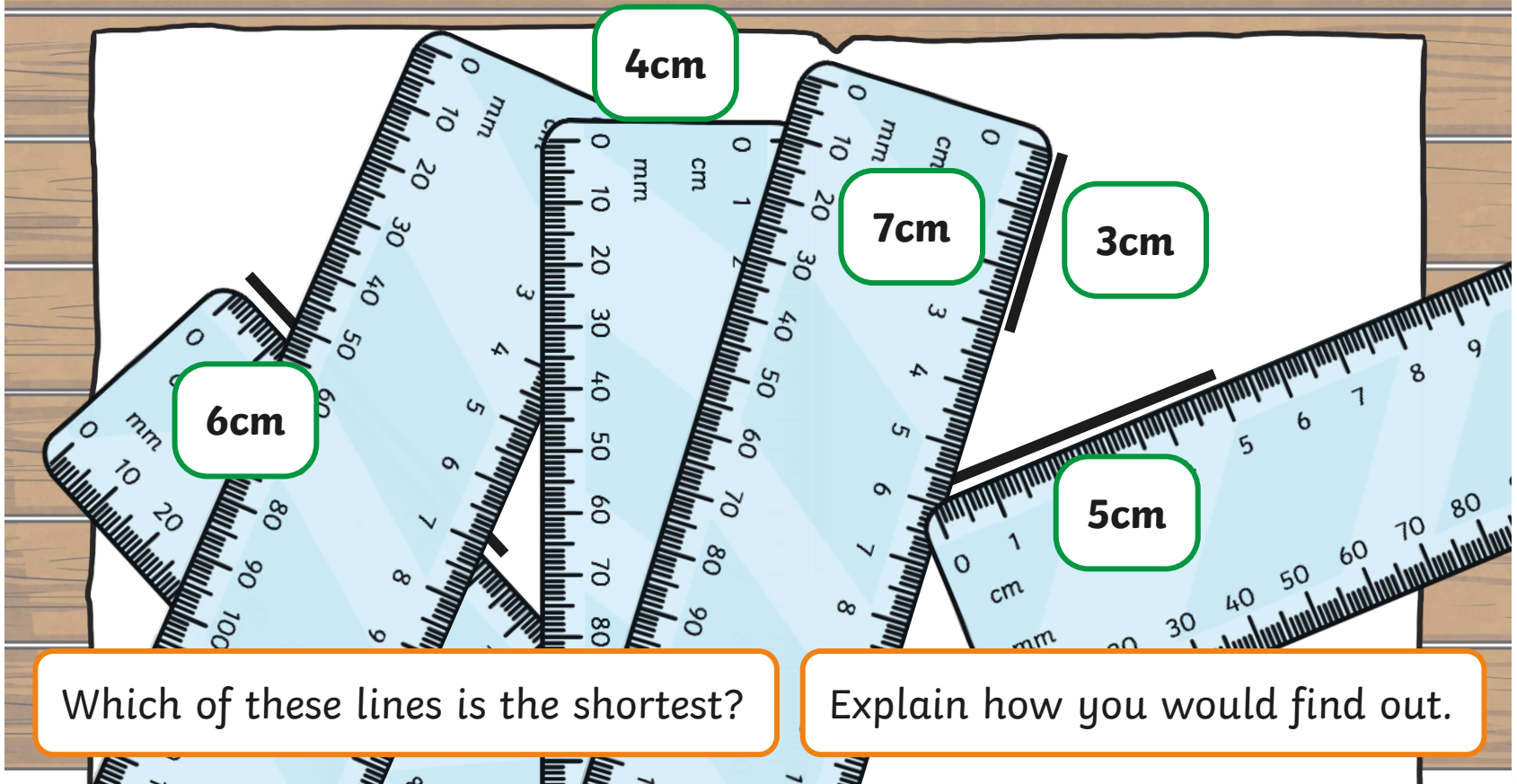
To the nearest centimetre, it is 25cm.



Do you agree? Explain why or why not.

Measurement Challenge

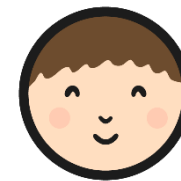
How would you measure these lines if they are all in different orientations?



Which of these lines is the shortest?

Explain how you would find out.

Measuring Length



Measuring Length

To measure length to the nearest centimetre.

Measure the length of these shoelaces with your ruler.

Shoelace

Measure these laces to the **nearest** centimetre.



Maths | Measurement | Measuring Length and Height | Lesson 1 of 4: Measuring Length in Centimetres

Measuring Length

To measure length to the nearest centimetre.

Use your ruler to measure these laces to the **nearest** centimetre.

Measure each shoelace to the nearest centimetre.

Tick the longest. Cross the shortest.

	_____ cm
	_____ cm
	_____ cm
	_____ cm



Maths | Measurement | Measuring Length and Height | Lesson 1 of 4: Measuring Length in Centimetres

Measuring Length

To measure length to the nearest centimetre.

Measure each shoelace to the **nearest centimetre**.

Tick the longest. Cross the shortest.

	_____ cm
	_____ cm
	_____ cm
	_____ cm

Measure the sides of this shoe box to the **nearest centimetre**.

_____ cm		_____ cm
_____ cm		_____ cm

What do you notice?

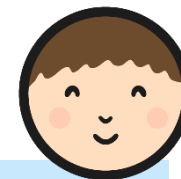
Would your shoe fit in this shoe box? Convince me!



Maths | Measurement | Measuring Length and Height | Lesson 1 of 4: Measuring Length in Centimetres

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Diving into Mastery



Dive in by completing your own activity!



Measuring Length in Centimetres



Measure these lines with a ruler.
Remember to start at 0.

 _____ cm

 _____ cm

 _____ cm

 _____ cm

Which line is the longest? Which is the shortest?

Can you find any of these objects
in your classroom?

Measure them to the nearest centimetre.



Aim

- To measure length to the nearest centimetre.

Success Criteria

- I can use a ruler to measure accurately.
- I can measure to the nearest centimetre.

