



# Maths

## Properties of Shape

# 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 the scheme.

**2D Shapes (1): Name 2D Shapes**  
This lesson teaches children to recognise and name 2-D shapes. Children identify shapes in their environment and name them. They take part in a shape hunt to search for circles, triangles, squares, rectangles, and hexagons. The lesson supports the national curriculum objectives for mathematics.

**NC Statement:** Recognise and name common 2-D and 3-D shapes.  
**Lesson Aim:** To name common 2D shapes.

**2D Shapes (2): Recognise 2D Shapes**  
This lesson teaches children to recognise and name 2-D shapes. They are able to identify shapes in groups of shapes. Children also demonstrate their understanding of shapes by showing different sizes and orientations. The lesson supports the national curriculum objectives for mathematics.

**NC Statement:** Recognise and name common 2-D and 3-D shapes.  
**Lesson Aim:** To recognise common 2D shapes.

**Introduction**

In this geometry unit, children learn to recognise and name common 2D and 3D shapes including: rectangles, squares, circles, triangles, cuboids, cubes, pyramids and spheres. Children handle these shapes and recognise them in different orientations and sizes and learn that rectangles, triangles, cuboids and pyramids are not always similar to each other. Children also learn to name everyday objects that are representations of 2D and 3D shapes.

**Resources**  
In addition to standard maths resources, you will need: straws or lolly sticks, cubes of playdough or modelling clay, 2D shapes, 3D shapes and examples of everyday 3D shapes.

**SolveIt Lesson Pack: Shape Art**  
Helpful in the correct colour of each shape in the paintings by following the clues. This SolveIt Lesson investigates shape in relation to positional language. It encourages the children to solve a problem by testing out their methods and reporting in an exploratory manner and to explain their findings to others.

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

- Recognise and name common 2D and 3D shapes;
- Make pictures and patterns with 2D shapes;
- Make models with 3D shapes.

children working at the expected level will be able to:

- Recognise 2D and 3D shapes in real life;
- Recognise 2D and 3D shapes in different sizes and orientations.

**Properties of Shape**  
Maths | 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 teach of the small steps on the White Rose Maths scheme of learning.

**Yearly Overview**

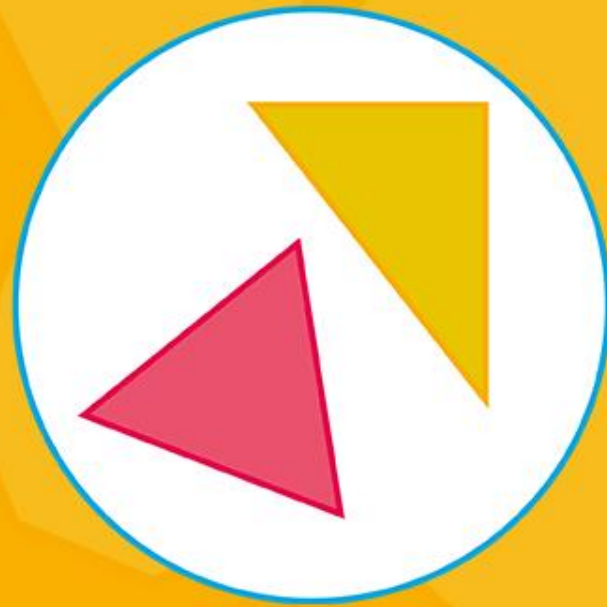
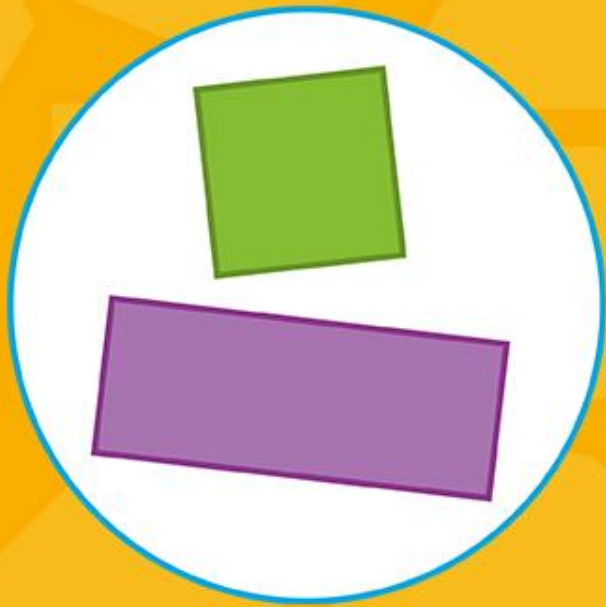
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)			Number: Addition and Subtraction (within 10)			Geometry: Shape		Number: Place Value (within 20)			Consolidation
Spring		Number: Addition and Subtraction (within 20)			Number: 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 Extension		Number: Place Value (within 100)	Measurement: Money		Time	Consolidation

See our [Properties of Shapes Steps to Progression](#) document.

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



# Sort 2D Shapes



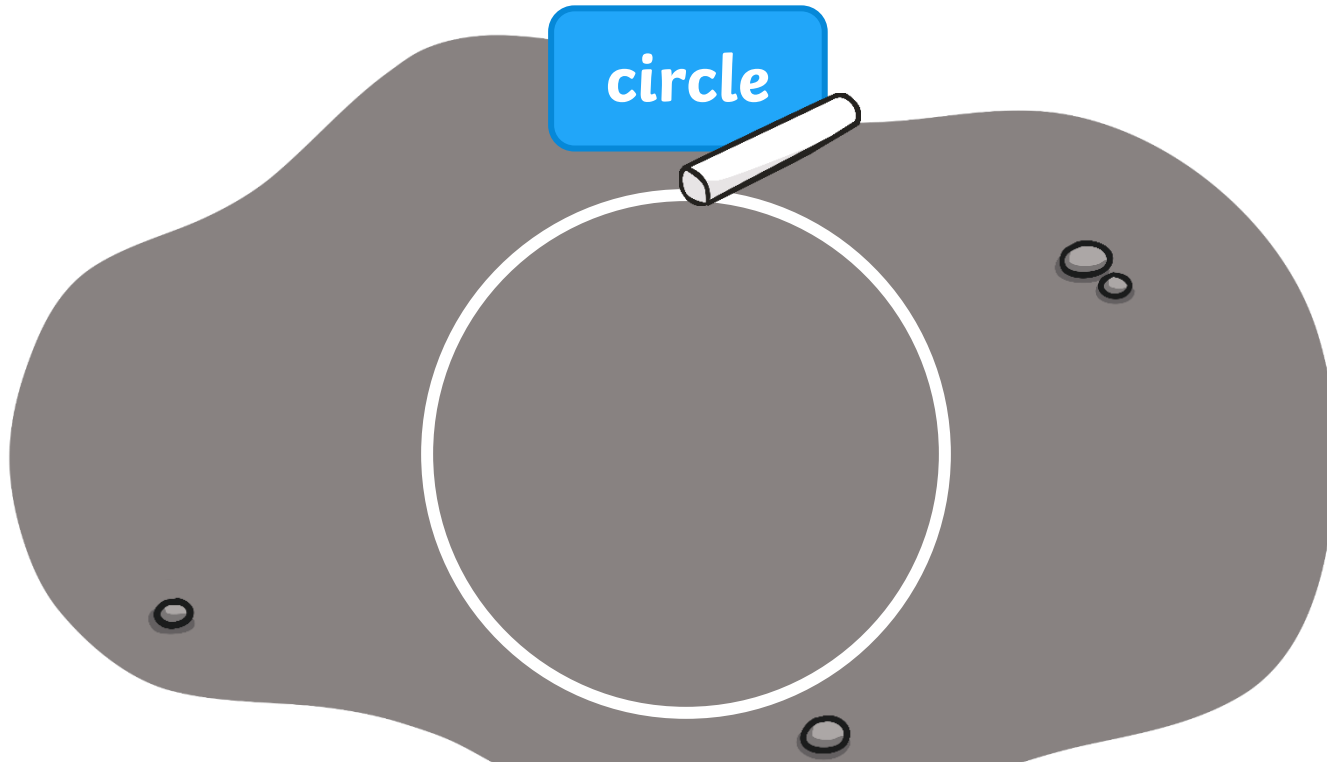
## **Aim**

- To sort common 2D shapes.

## **Success Criteria**

- I can identify a shape that doesn't belong in a set.
- I can label groups of 2D shapes.
- I can sort 2D shapes into groups.
- I can add a shape to a set.

Can you draw this shape?

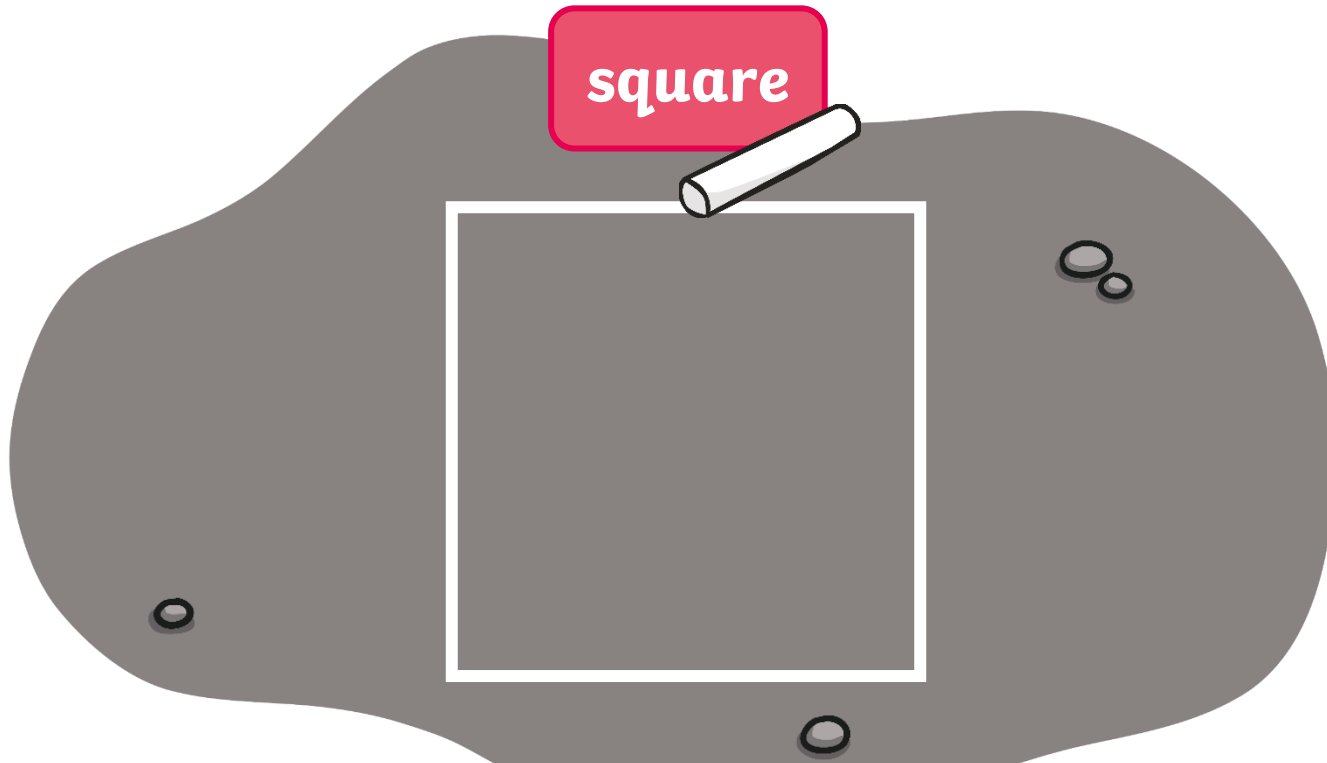


**Compare your drawing with your classmates.**

What's the same about them?

What's different?

Can you draw this shape?



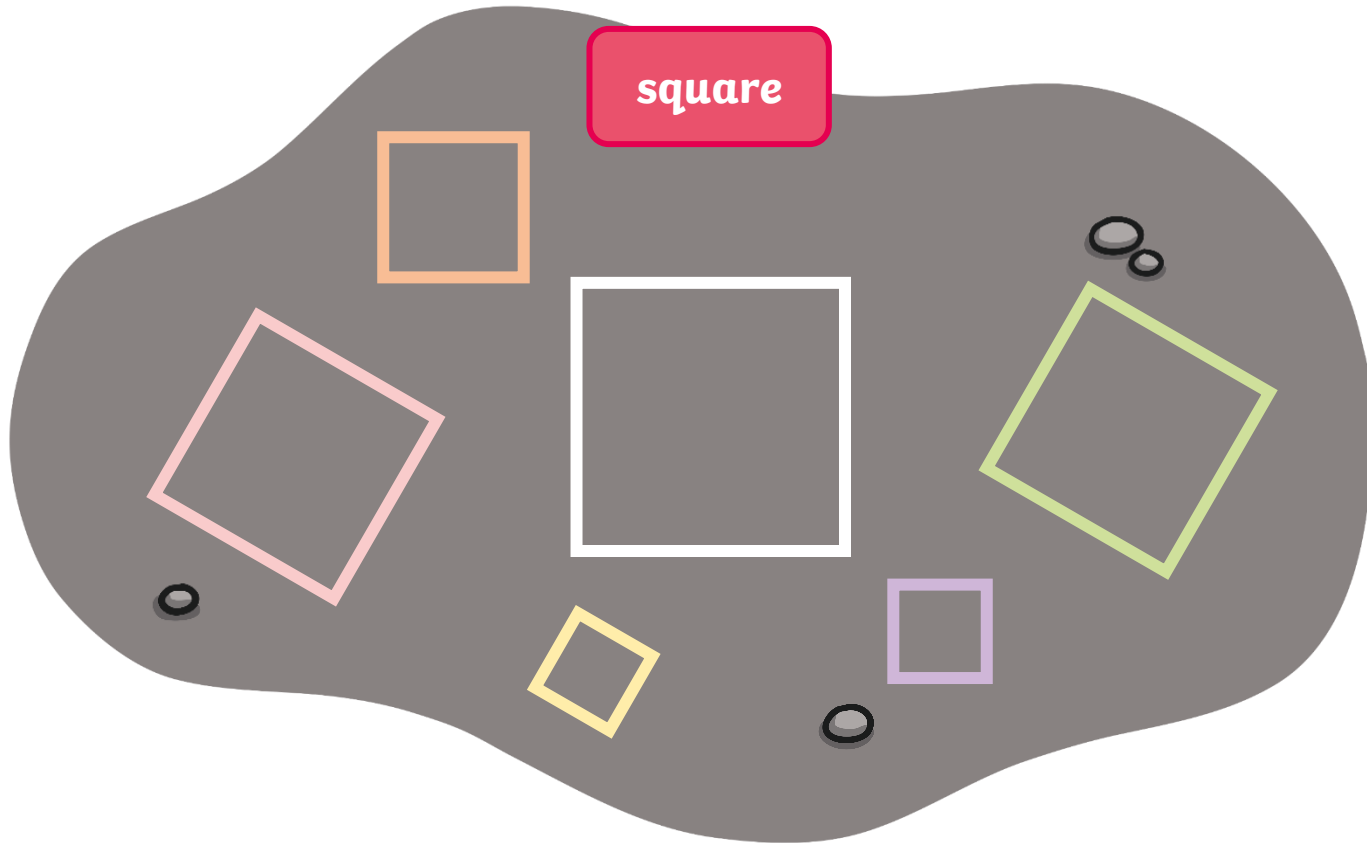
**Compare your drawing with your classmates.**

What's the same about them?

What's different?

Can you draw a different square?

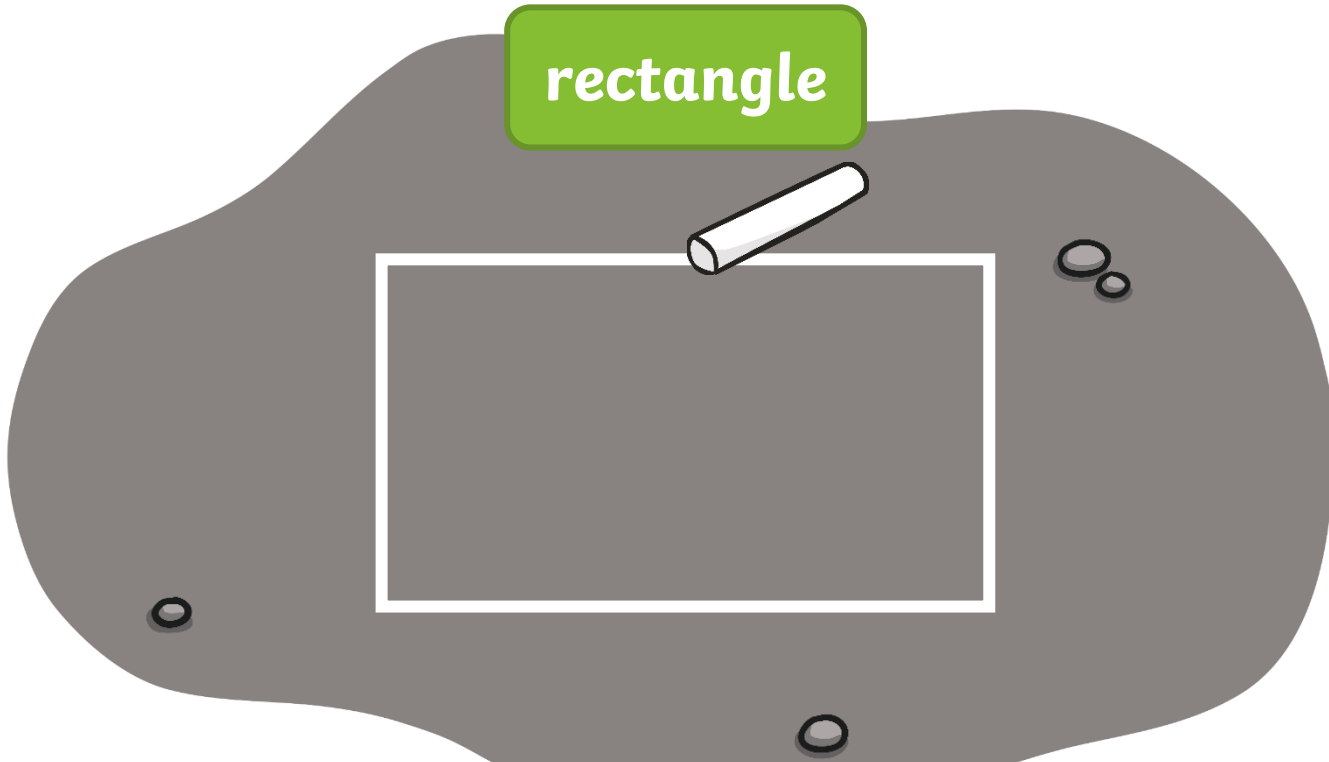
What do you need to remember?



Squares have 4 corners and 4 straight sides of the same length.

Can you draw this shape?

**rectangle**



**Compare your drawing with your classmates.**

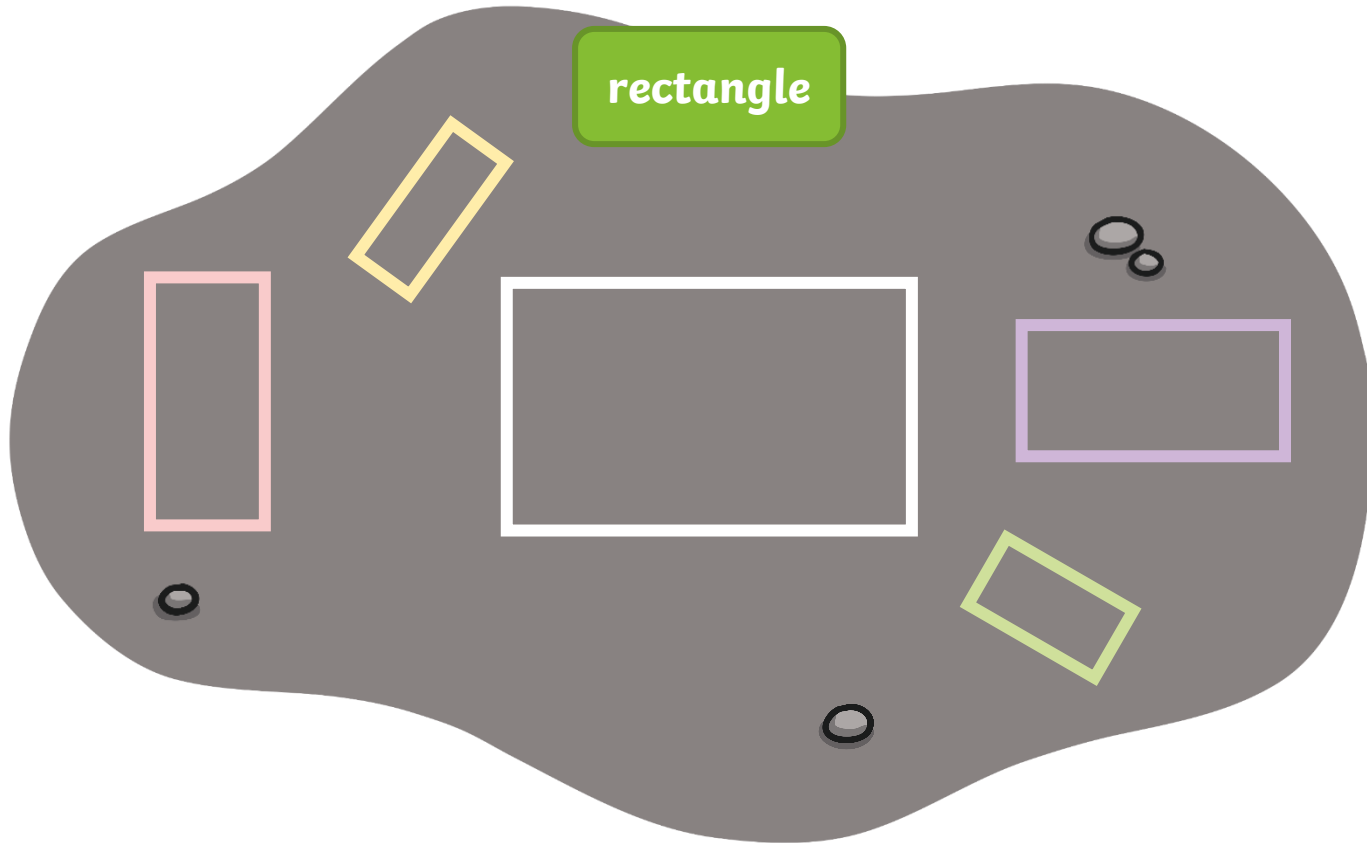
What's the same about them?

What's different?



Can you draw a different rectangle?

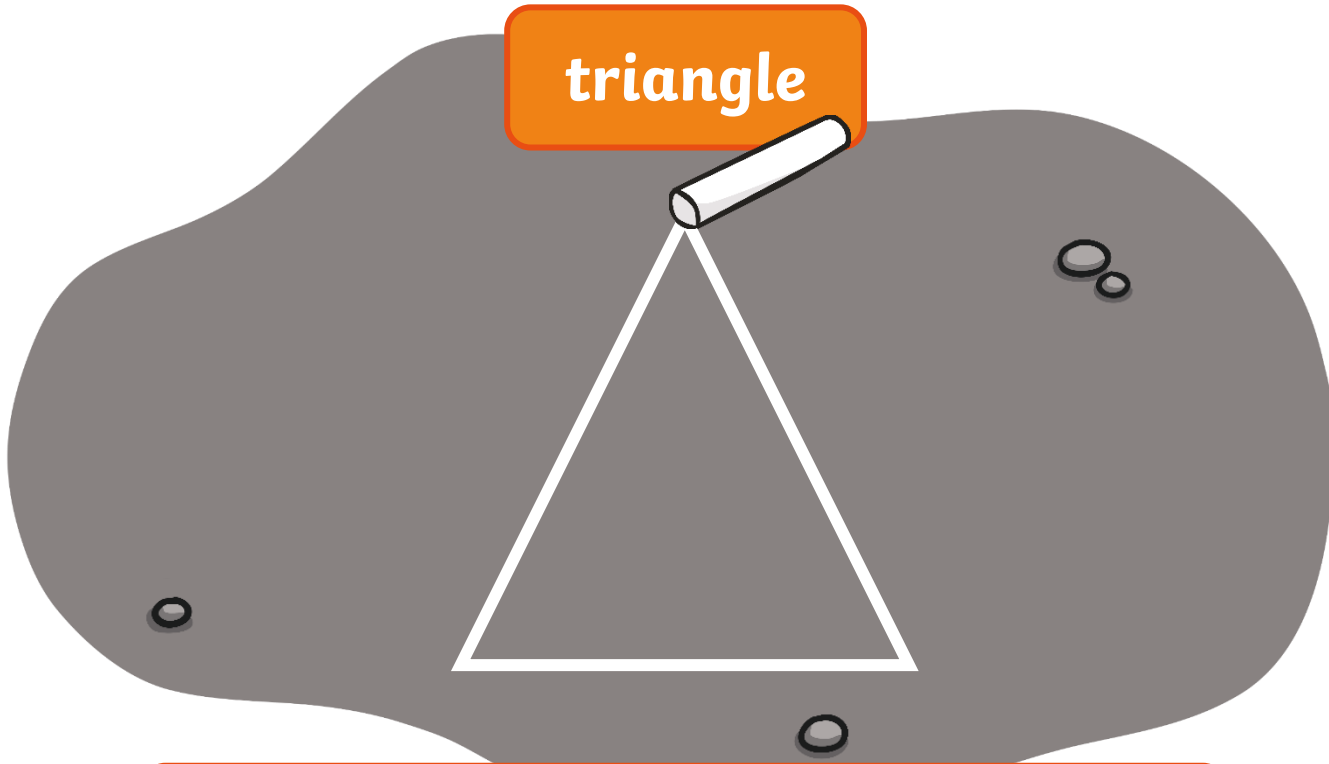
What do you need to remember?



Rectangles have 4 corners and 4 straight sides.

Can you draw this shape?

**triangle**



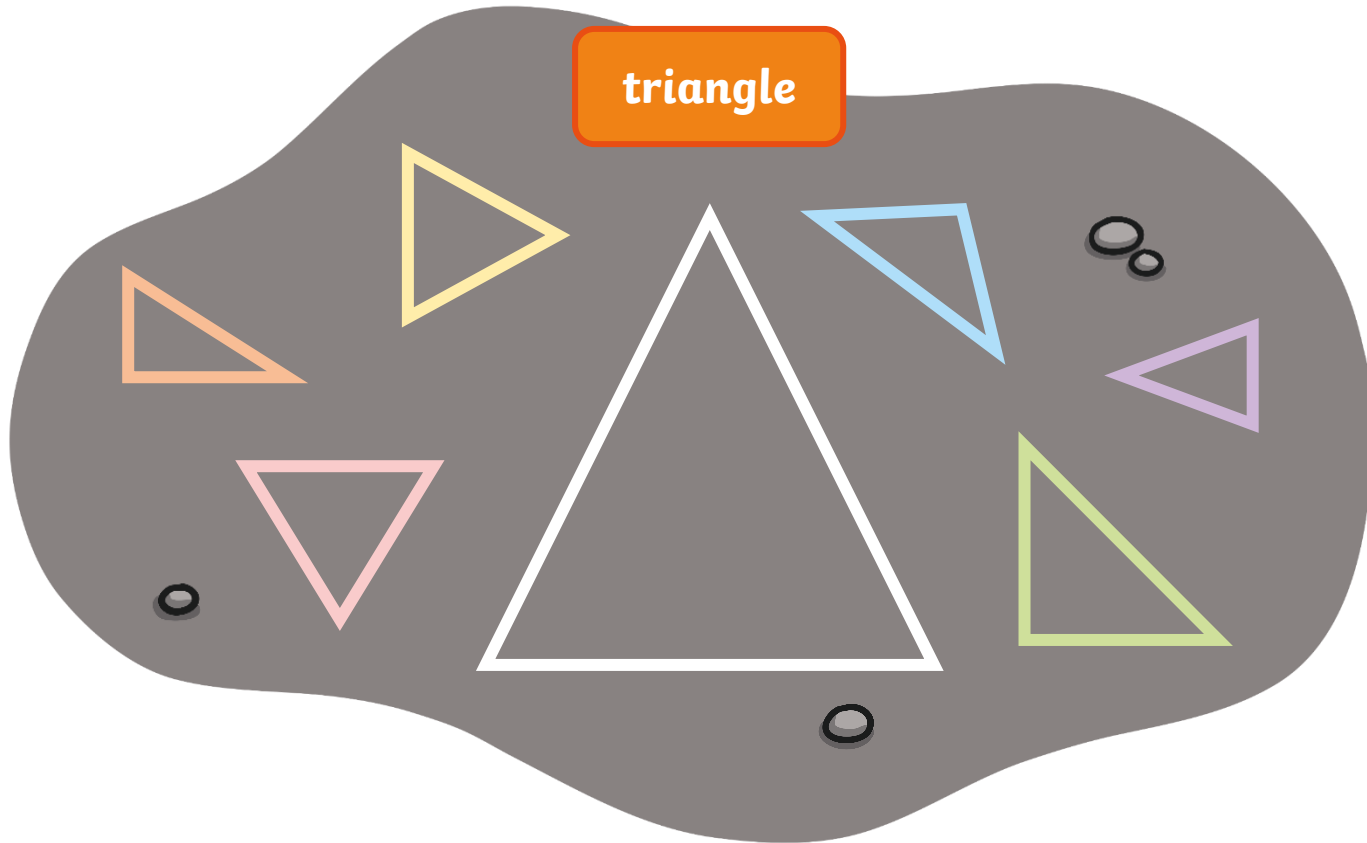
**Compare your drawing with your classmates.**

What's the same about them?

What's different?

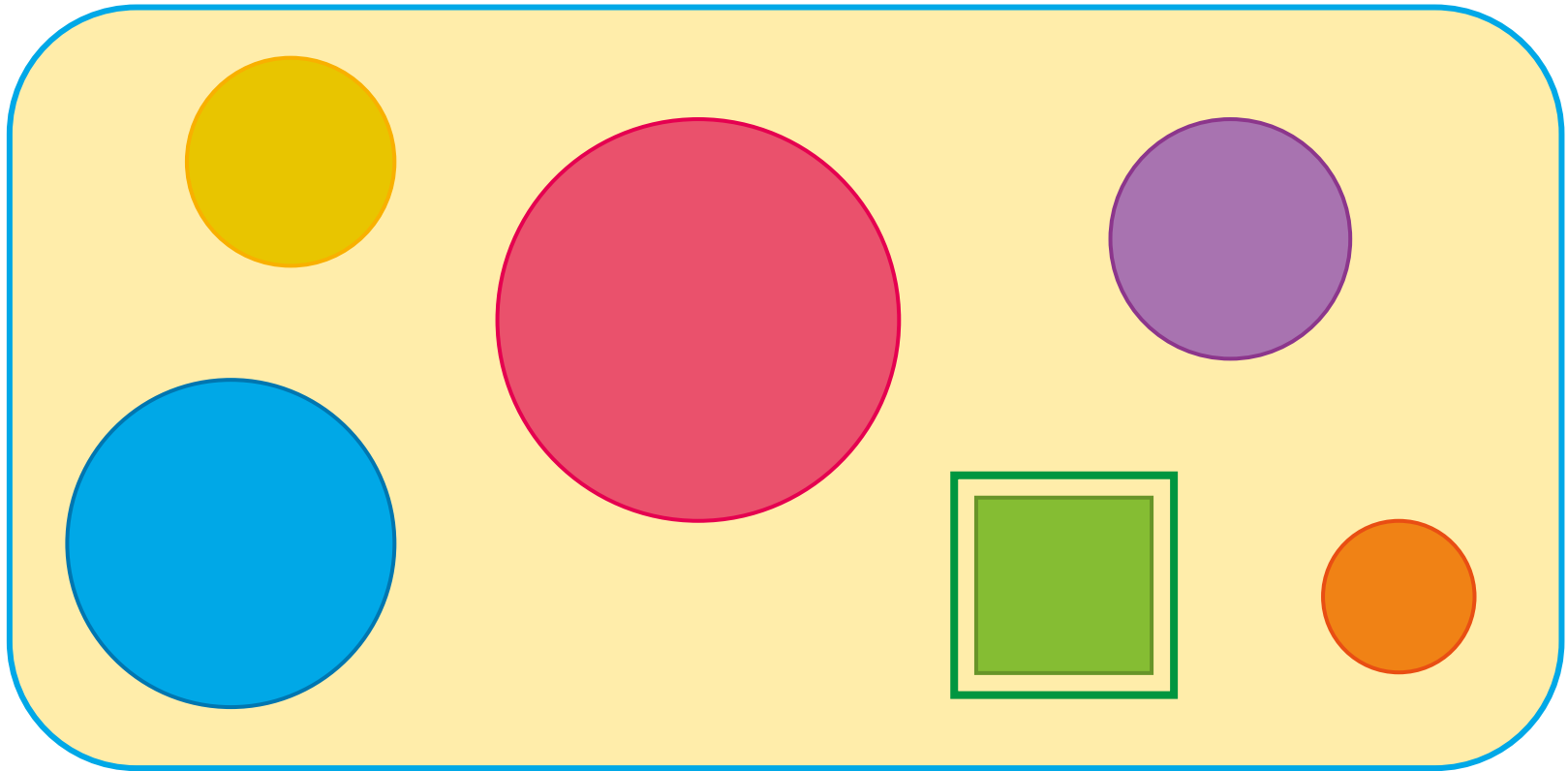
Can you draw a different triangle?

What do you need to remember?



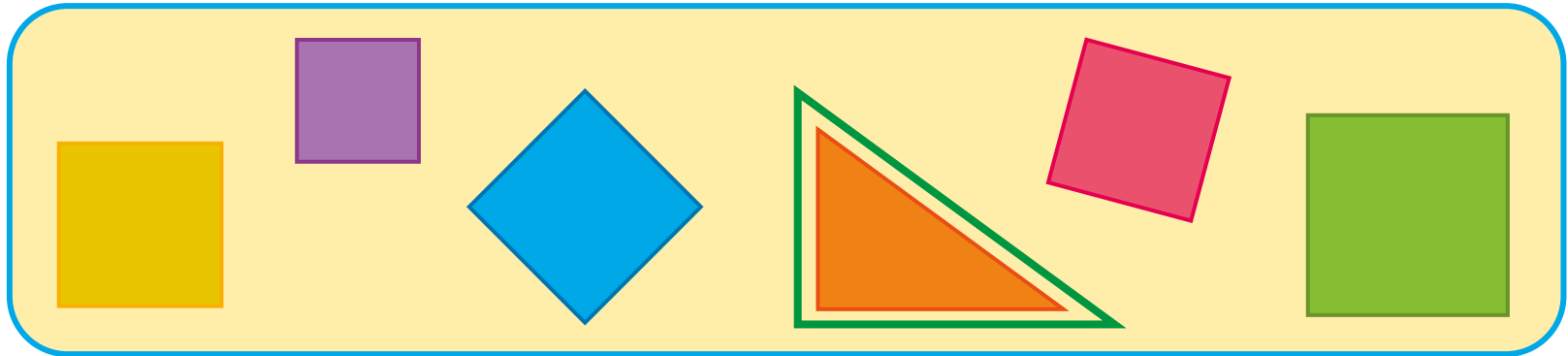
Triangles have 3 corners and 3 straight sides.

These shapes have been sorted into a group.  
Can you spot the odd one out?



Can you explain why?

These shapes have been sorted into a group.  
Can you spot the odd one out?



What is the same about the triangle and squares?

They have corners and straight sides.

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What is different?

Triangles have 3 sides and 3 corners.  
Squares have 4 sides and 4 corners.

These shapes are in 2 sorting rings.

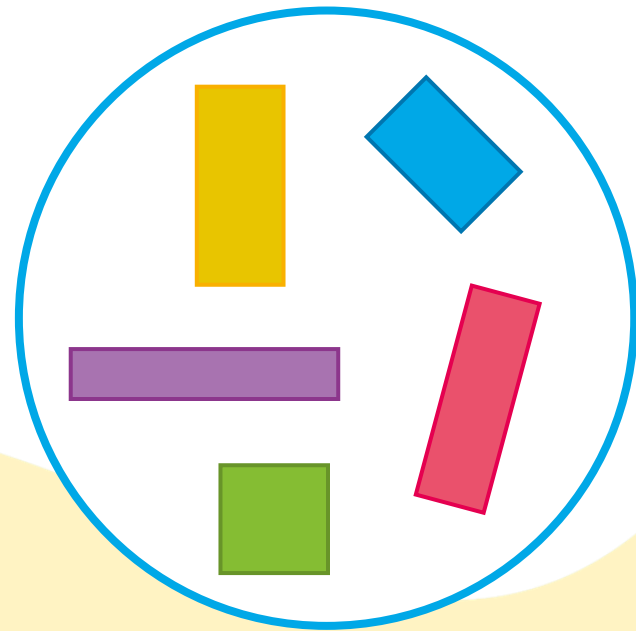
How would you label each group?



triangles

3 corners

3 straight sides

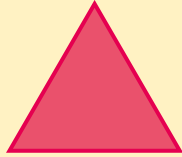


rectangles

4 corners

4 straight sides

Can you sort these shapes into the sets?



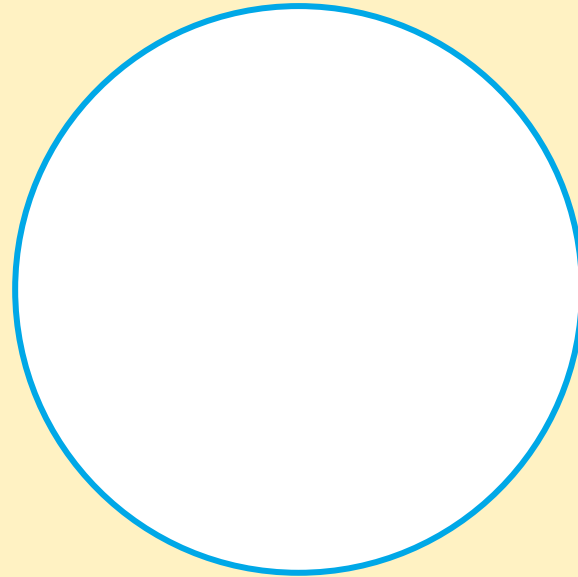
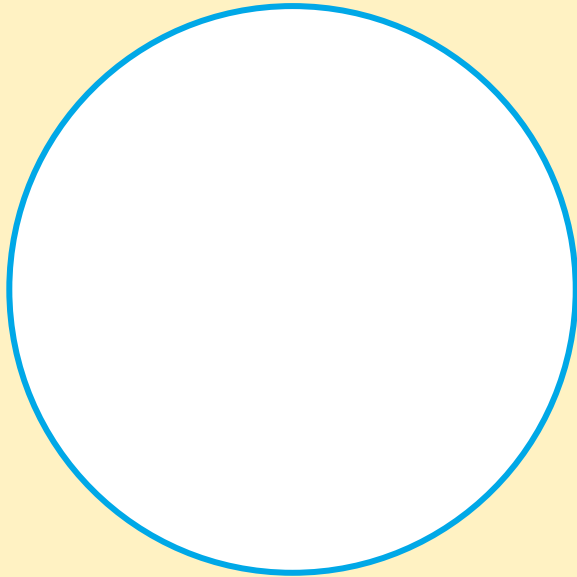
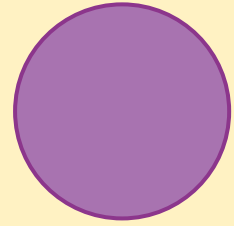
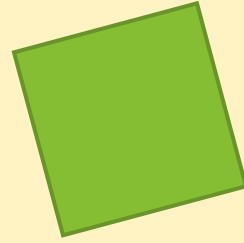
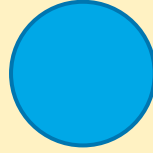
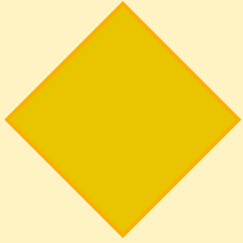
triangles

squares

Which shape didn't belong in either set?

Can you explain why?

Can you sort these shapes into 2 groups?

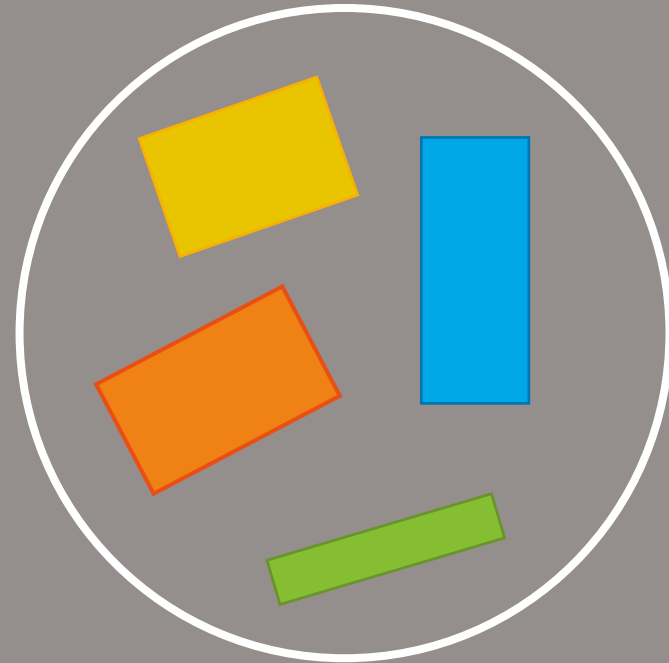


What can you tell me about each group?



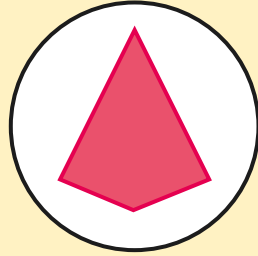
Have these shapes been sorted correctly?

Can you explain why?

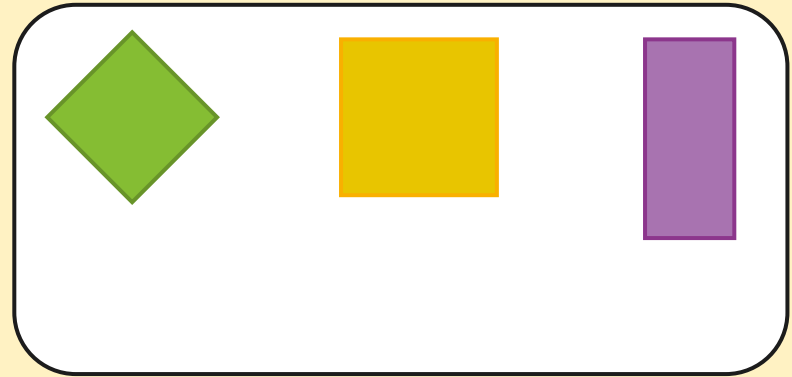
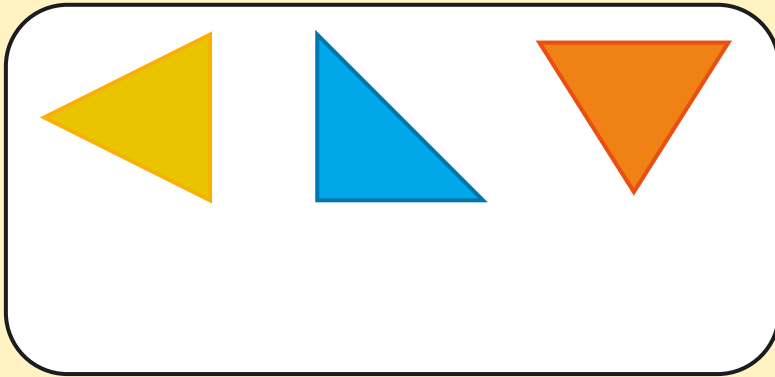


What would you change?

Can you add these shapes to the sets?



Where could they go?



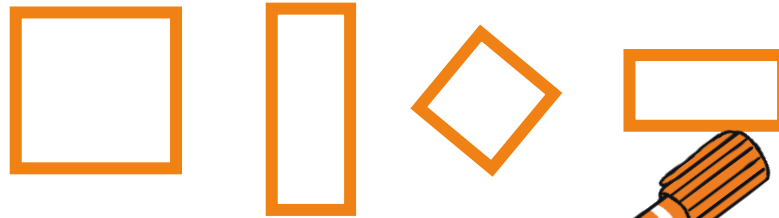
Can you explain why?

The shapes in this set have 4 sides and 4 corners.

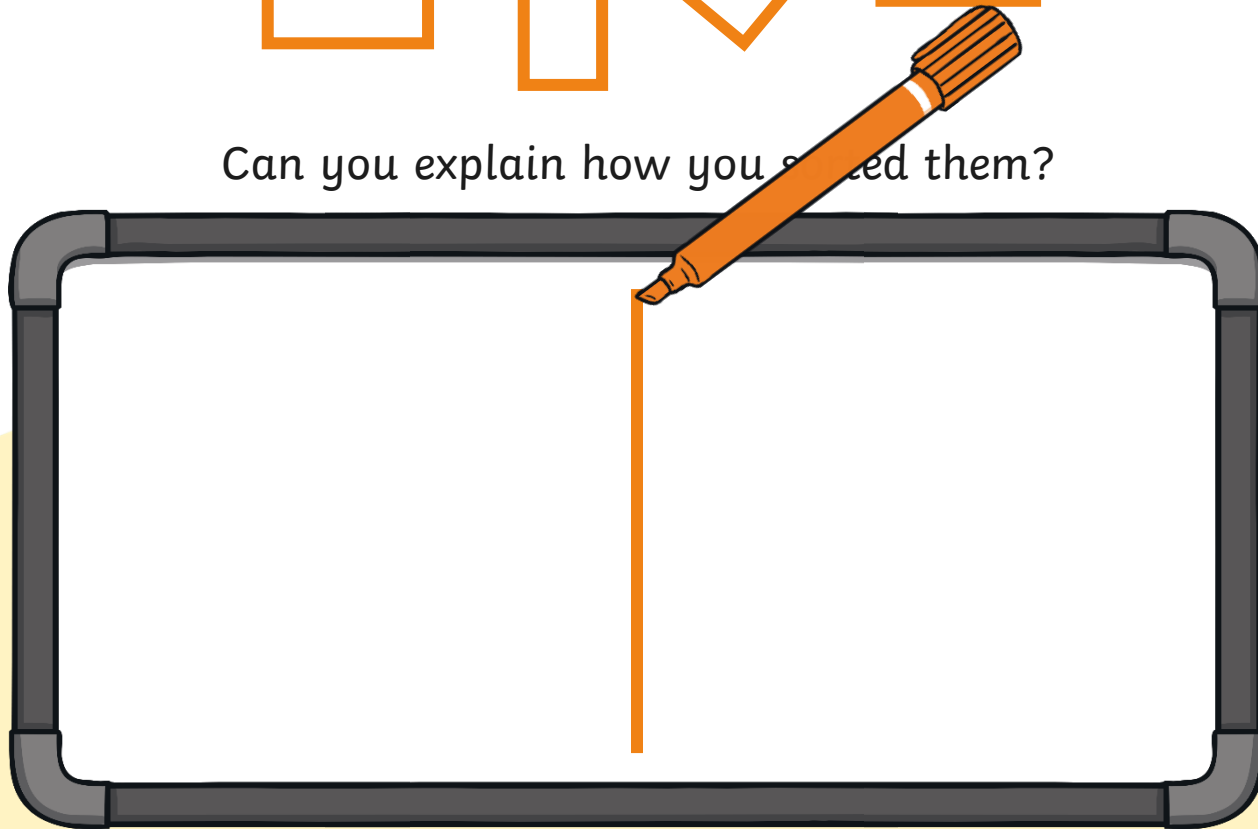
## Draw It

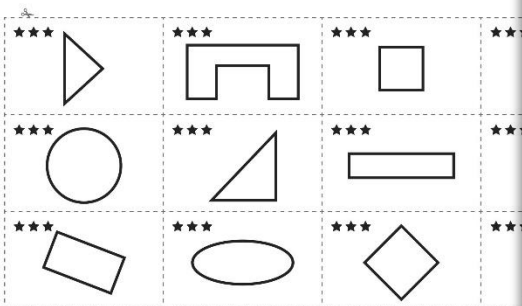
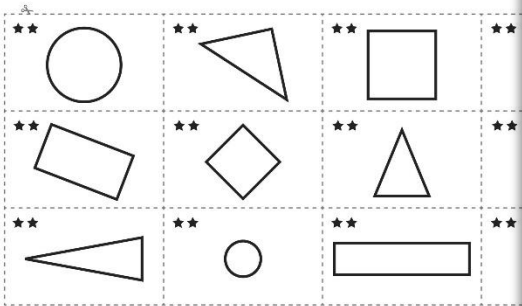
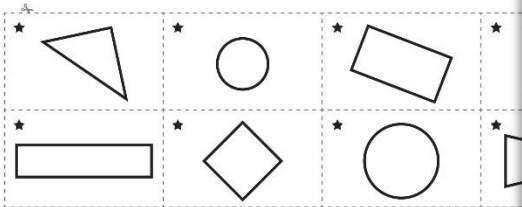
Draw a line from the top to the bottom of your board to make 2 spaces.

Find a way to sort the 2D shapes.



Can you explain how you sorted them?





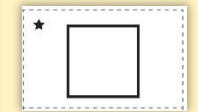
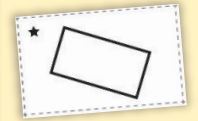
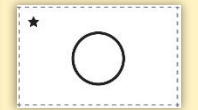
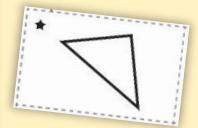
## Sort 2D Shapes

To sort common 2D shapes.

Squares are special rectangles because each side is the same length.  
For this activity, squares have been sorted into their own group.

- Cut out the shape pictures.
- Sort them into groups.
- Stick them when you have checked that they are in correct groups.

circles	squares
triangles	rectangles



## Diving into Mastery

Dive in by completing your own activity!



**Sort 2D Shapes**

How would you sort these 2D shapes?

**Draw lines around groups of shapes.**

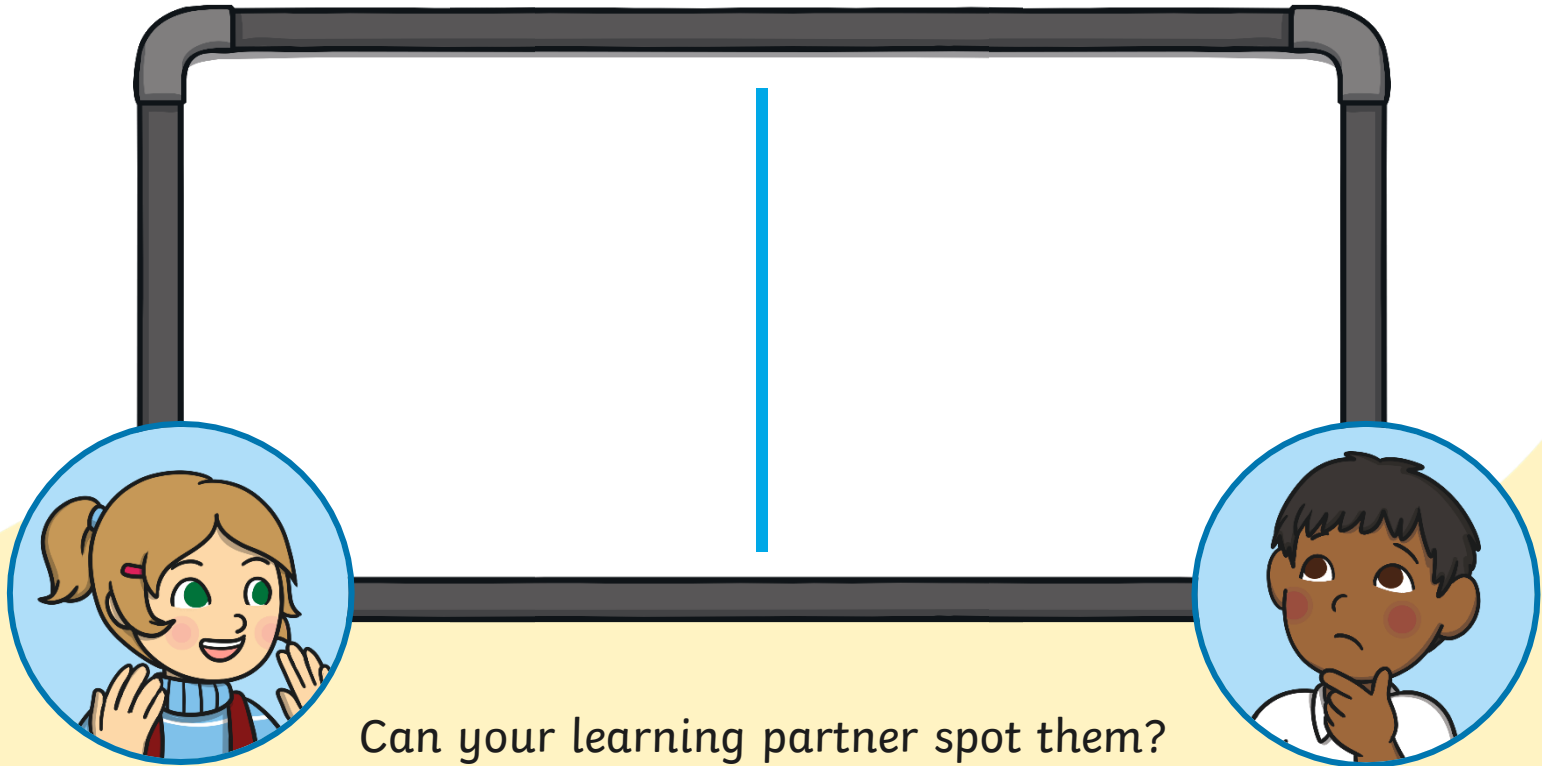
**Draw lines to match the shapes with the sets.**

squares	rectangles	circles	triangles

Which shapes don't belong to any of these sets?

Draw a set of triangles and a set of rectangles.

Include a mistake in each set.



Can your learning partner spot them?

How do they know?

## Aim



- To sort common 2D shapes.

## Success Criteria

- I can identify a shape that doesn't belong in a set.
- I can label groups of 2D shapes.
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