Properties of Shape: Recognise 2D Shapes

Aim:	**Success Criteria:**	**Resources:**
Recognise and name common 2-D and 3-D shapes. DfE Ready-to-Progress Criteria: Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. (1G-1) White Rose Small Step: Recognise and name 2-D shapes. To recognise common 2D shapes.	I can identify common 2D shapes. I can draw common 2D shapes. I can describe common 2D shapes.	Lesson Pack 2D shapes Rulers 2D Shape Names Word Mat Cardboard cut out shapes - as required
	Key/New Words: 2D shape, square, rectangle, triangle, circle, side, corner, curved, straight, long, short.	**Preparation:** Differentiated Recognise 2D Shapes Sheet - one per child Diving into Mastery Activity Cards - as required

Prior Learning:	It will be helpful if children have experience naming 2D shapes in their environment. The lesson Name 2D Shapes has been prepared to support this learning.

Learning Sequence

	Remember It: This part of the lesson recaps previous learning by inviting children to name 2D shapes and identify them in the environment. Ask the children to stand up. Each slide on the Lesson Presentation will show a different 2D shape for the children to name. Ask the children to draw the shape in the air with their fingers or on the floor with their feet etc. Then invite them to point to the shape in the classroom. Can the children identify common 2D shapes?	
	Describe 2D Shapes: The Lesson Presentation describes shapes for children to identify. Then invite children to describe a shape for their classmates to name. Encourage the children to use the terms 'sides', 'corners', 'straight', 'curved', 'long' and 'short' to describe the properties. Can the children describe common 2D shapes?	
	True or False? The Lesson Presentation shows different representations of a 2D shape with the statement 'These are all _ .' Children decide if the statement is correct and explain their reasoning.	
	Find It: The Lesson Presentation shows a selection of similar shapes. Ask the children to identify the named shape. Invite them to explain to a partner why some are correct representations and why some are not. Can the children identify common 2D shapes?	
	Drawing 2D Shapes: Use the Lesson Presentation to show children how to draw 2D shapes. It may be useful for children to have a pencil and a piece of paper to follow along and practice drawing 2D shapes before doing it independently. If the children have experience using rulers to draw straight lines, these could be used to help them draw their 2D shapes.	
	Recognise 2D Shapes: Provide each child with a differentiated Recognise 2D Shape Activity Sheet to investigate. Can the children identify and draw common 2D shapes? Children identify circles, squares, triangles and rectangles in collections of different 2D shapes. They then draw an example of each shape. Children identify circles, squares, triangles and rectangles in collections of 2D shapes with similar properties. They then draw two different examples of each shape. Children look at a collection of 2D shapes with similar properties and count the number of circles, rectangles, triangles and squares that they see. They draw two examples of each shape showing different sizes and orientations.	

Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Children are presented with a collection of 2D shapes shown in different orientations. They count the shapes and explain how they identified them. Children match clues with a triangle and rectangle. They then prepare a clue for a square. It would be helpful if children had 2D shapes to handle to help them investigate the properties closely.

Children find the common theme within a group of shapes and identify the odd one out explaining their reasoning. Children may benefit from having a 2D shape word mat to refer to.

Children see part of a 2D shape and investigate what it could be. They name the shape, explain their reasoning and explore further possibilities.

Change It: Each slide on the Lesson Presentation shows a shape. Children describe how they could be changed to make a named 2D shape.

Exploreit

Learnit: Children will find this visually exciting Knowledge Organiser a useful tool for learning shape 2D names and properties.

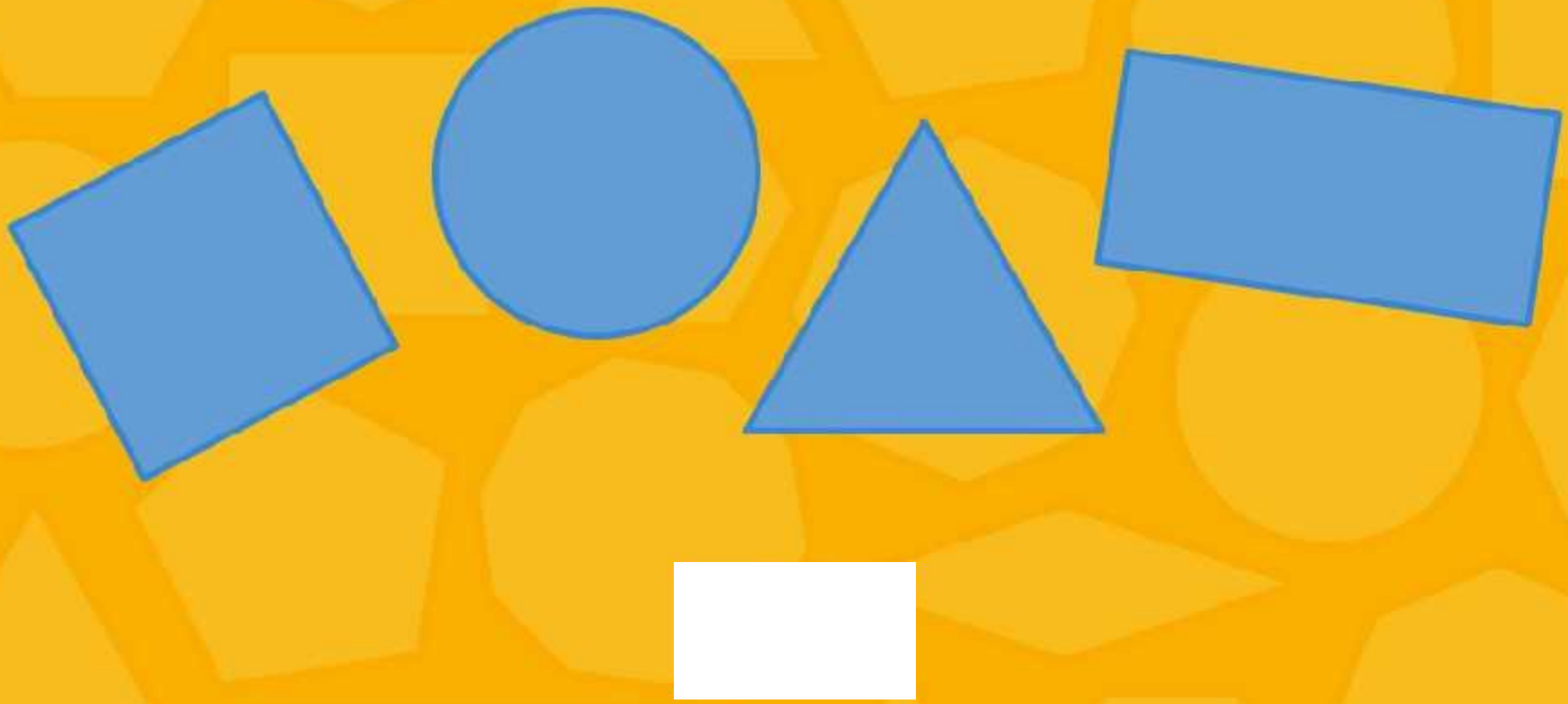
Findit: Children choose a shape and make a collection of different representations of that shape.

Spotit: Children make a collection of 2D shapes with the same properties, adding one with different properties. They then ask their learning partner to find the odd one out explaining their reasoning.

Maths

Properties of Shape

Recognise 2D Shapes



Aim

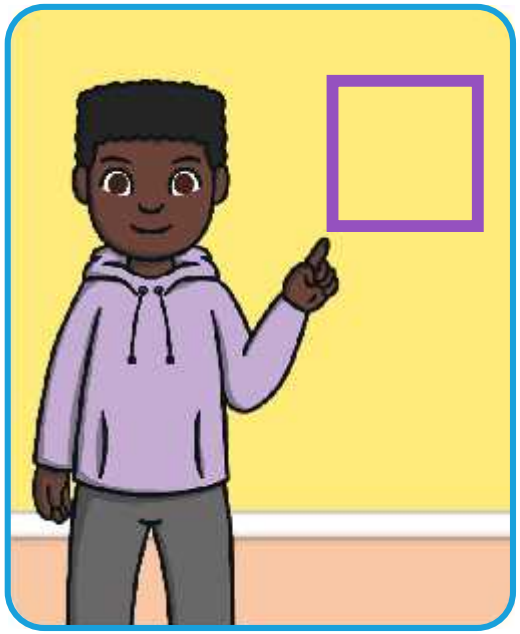
- To recognise common 2D shapes.

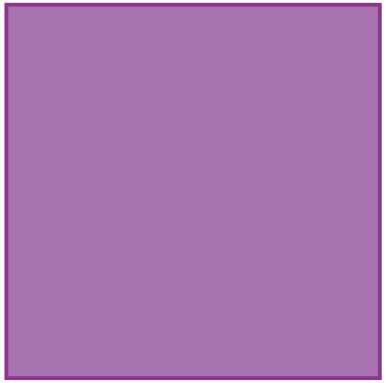
Success Criteria

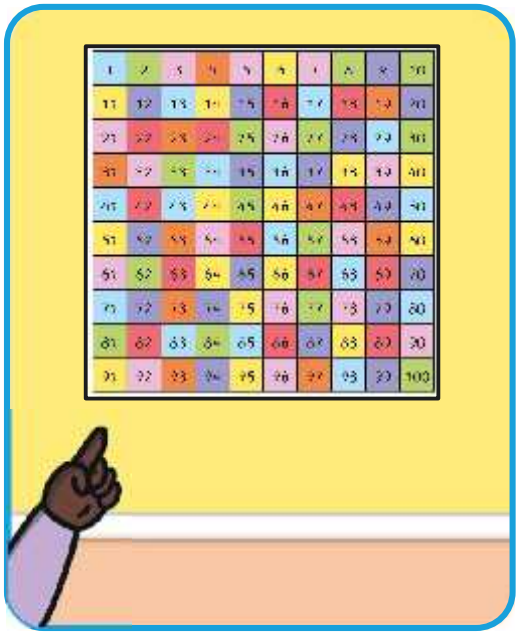
- I can identify common 2D shapes.
- I can draw common 2D shapes.
- I can describe common 2D shapes.

Remember It

Can you name this shape?







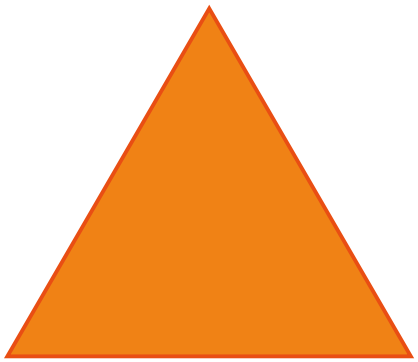
square

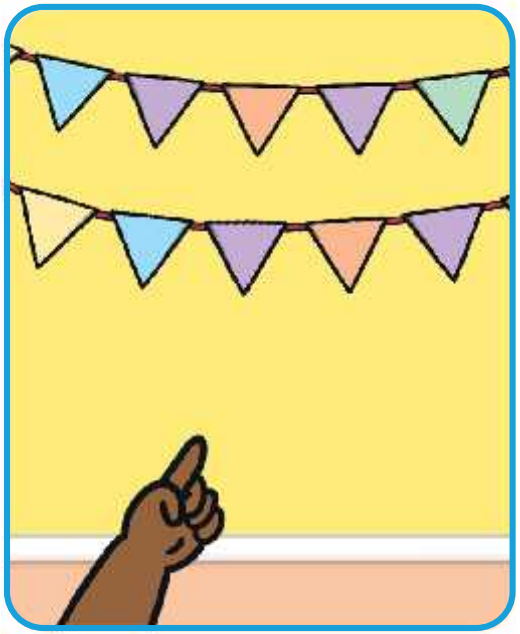
Draw a square in the air with your finger.

Point to a square in the classroom.

Remember It

Can you name this shape?





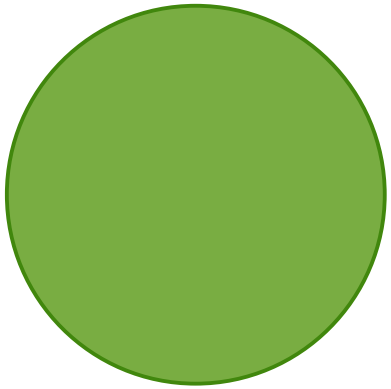
triangle

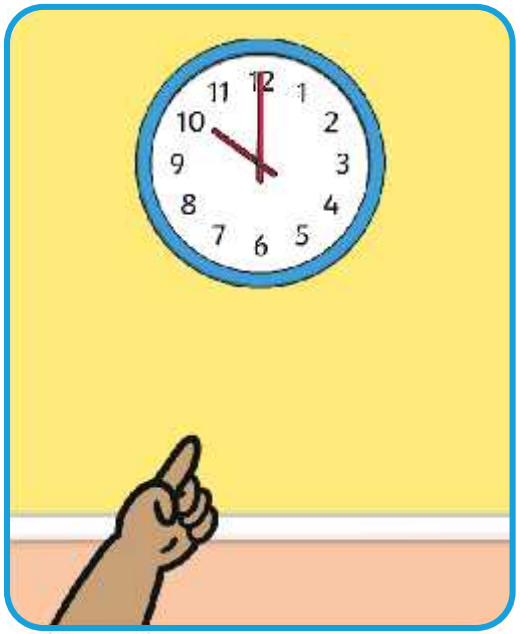
Draw a triangle on the floor with your foot.

Point to a triangle in the classroom.

Remember It

Can you name this shape?





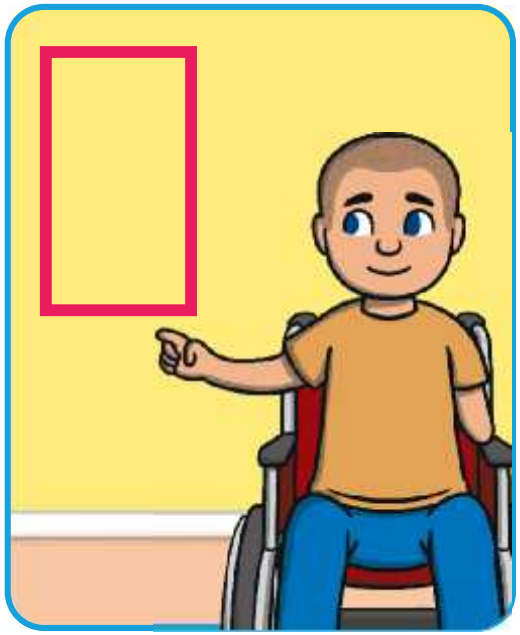
circle

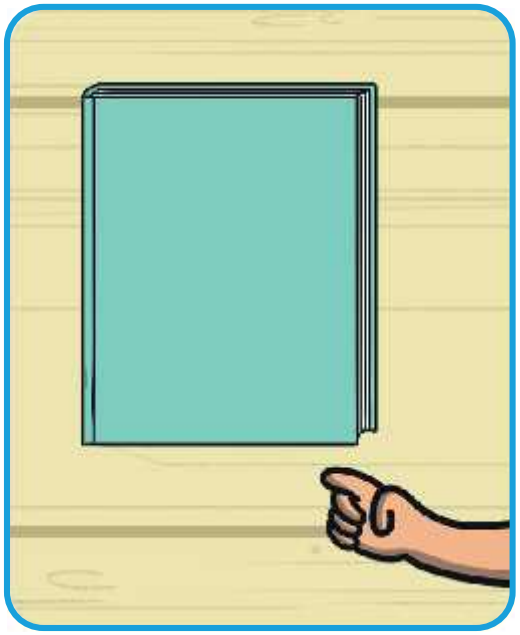
Make a circle with your hips.

Point to a circle in the classroom.

Remember It

Can you name this shape?





rectangle

Draw a rectangle in the air with your finger.

Point to a rectangle in the classroom.

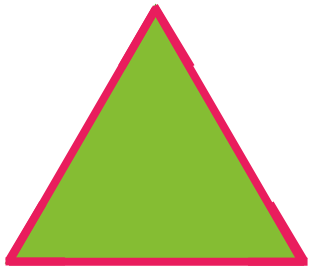
Describe 2D Shapes

Which shape am I describing?

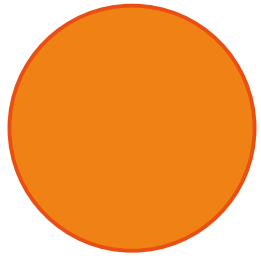
It has 3 straight sides and 3 corners.

rectangle ○

square ○



triangle ✓



circle ○

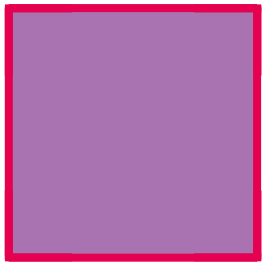
Triangles have 3 straight sides and 3 corners.

Describe 2D Shapes

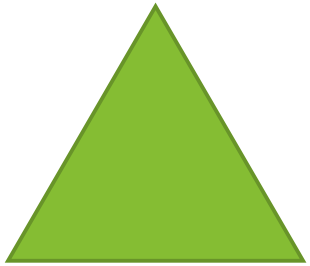
Which shape am I describing?

It has 4 straight sides and 4 corners.
Each side is the same length.

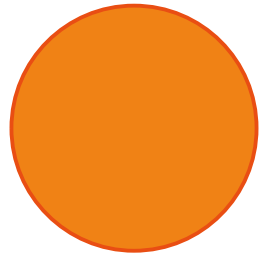
rectangle ○



square ✓



triangle ○



circle ○

Squares have 4 straight sides and 4 corners.

Each side is the same length.

Describe 2D Shapes

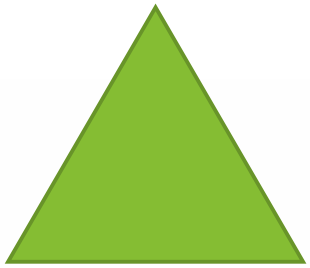
Describe a shape.

Use these words to help you.

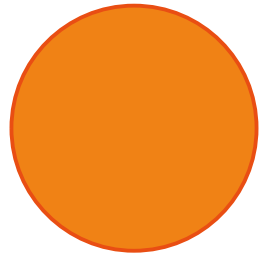
side	corner	straight	curved	long	short

rectangle

square



triangle

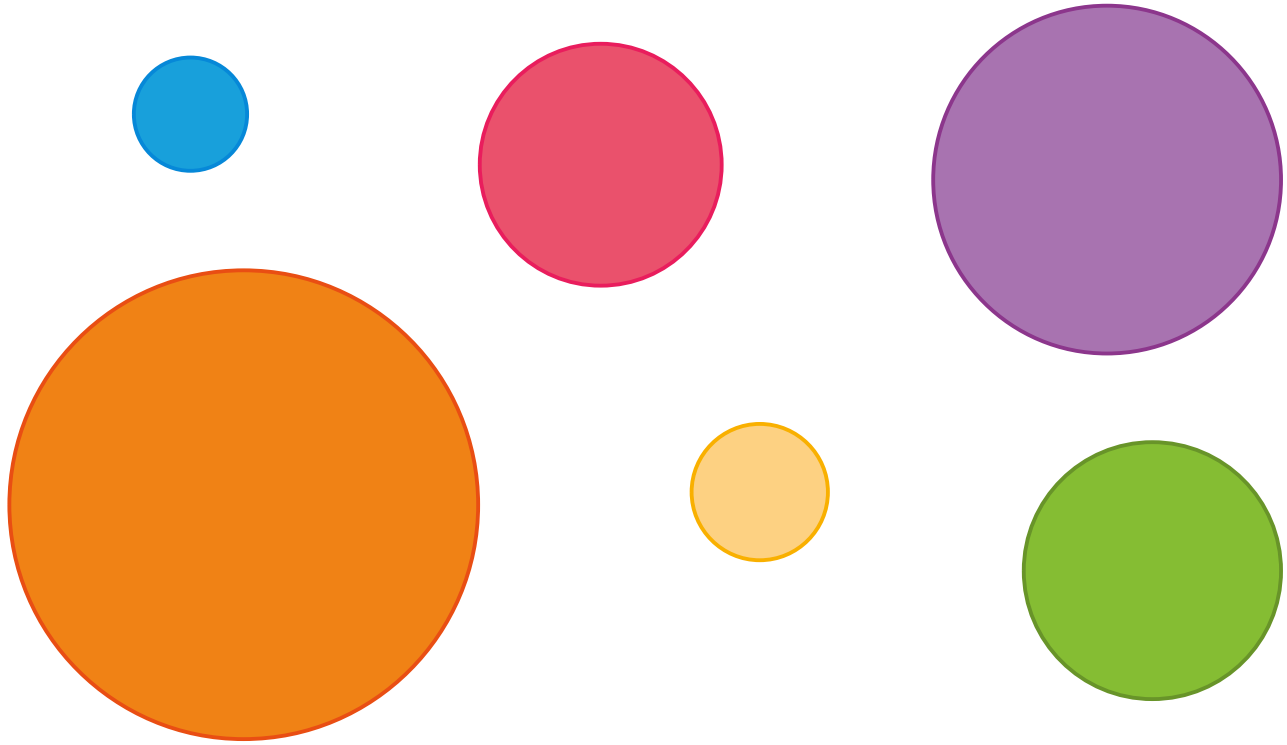


circle

True or false?

These shapes are all circles.

True



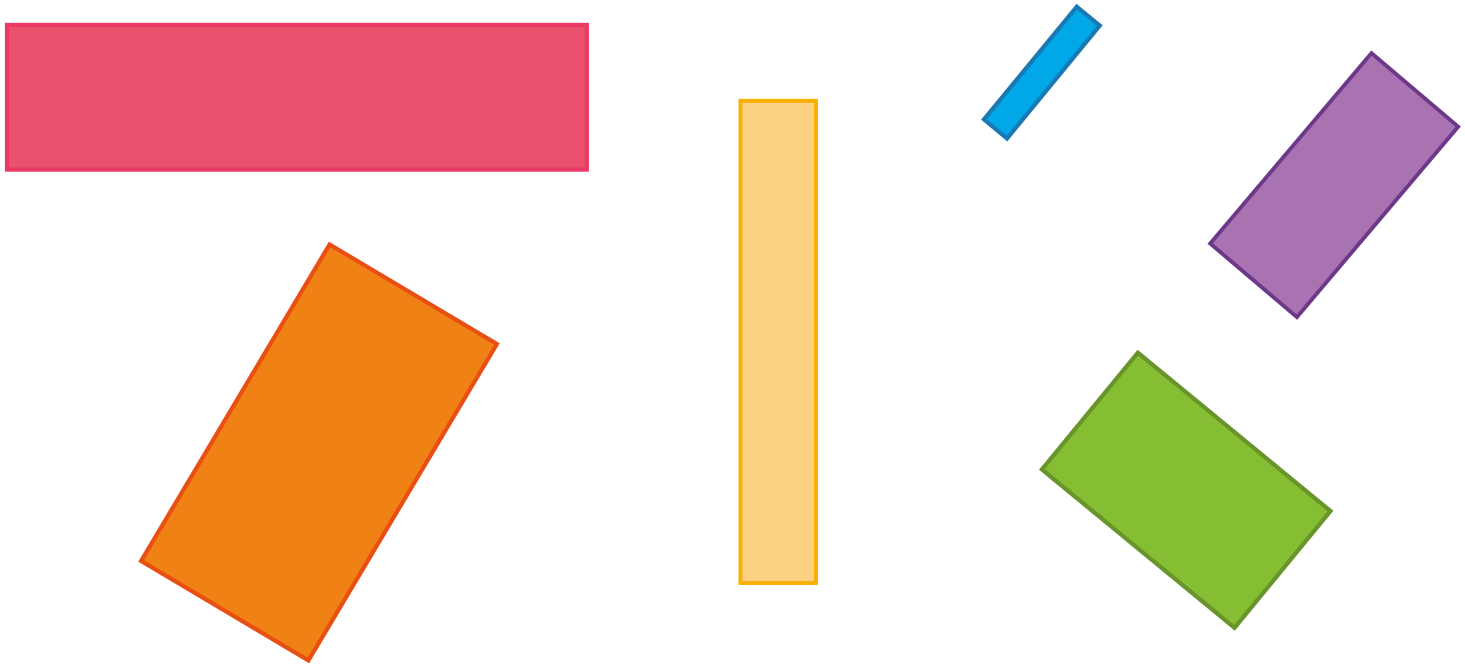
Does it matter what size or colour they are?

No

True or false?

These shapes are all rectangles.

True



Can you explain why?

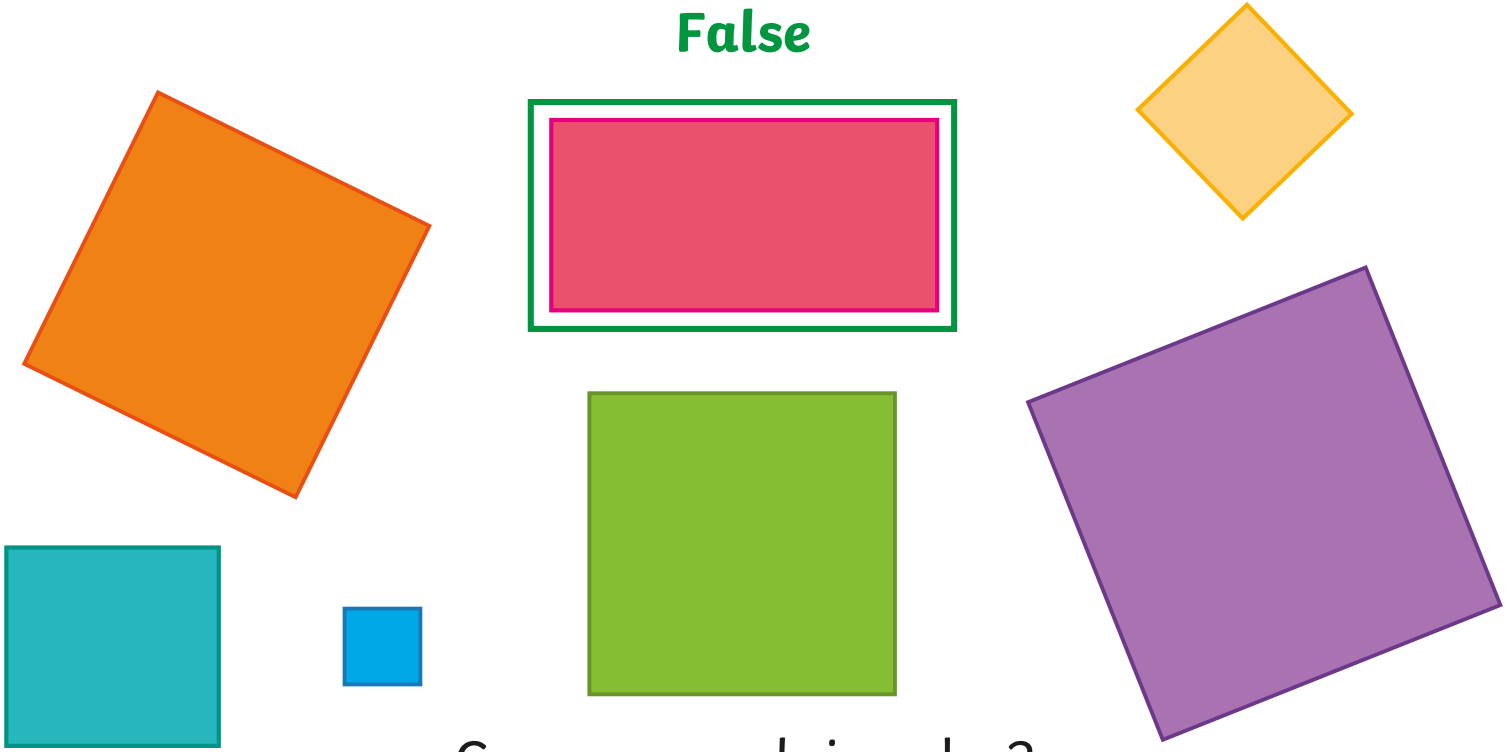
Rectangles have 4 straight sides and 4 corners.

These shapes all have 4 straight sides and 4 corners.

True or false?

These shapes are all squares.

False



Can you explain why?

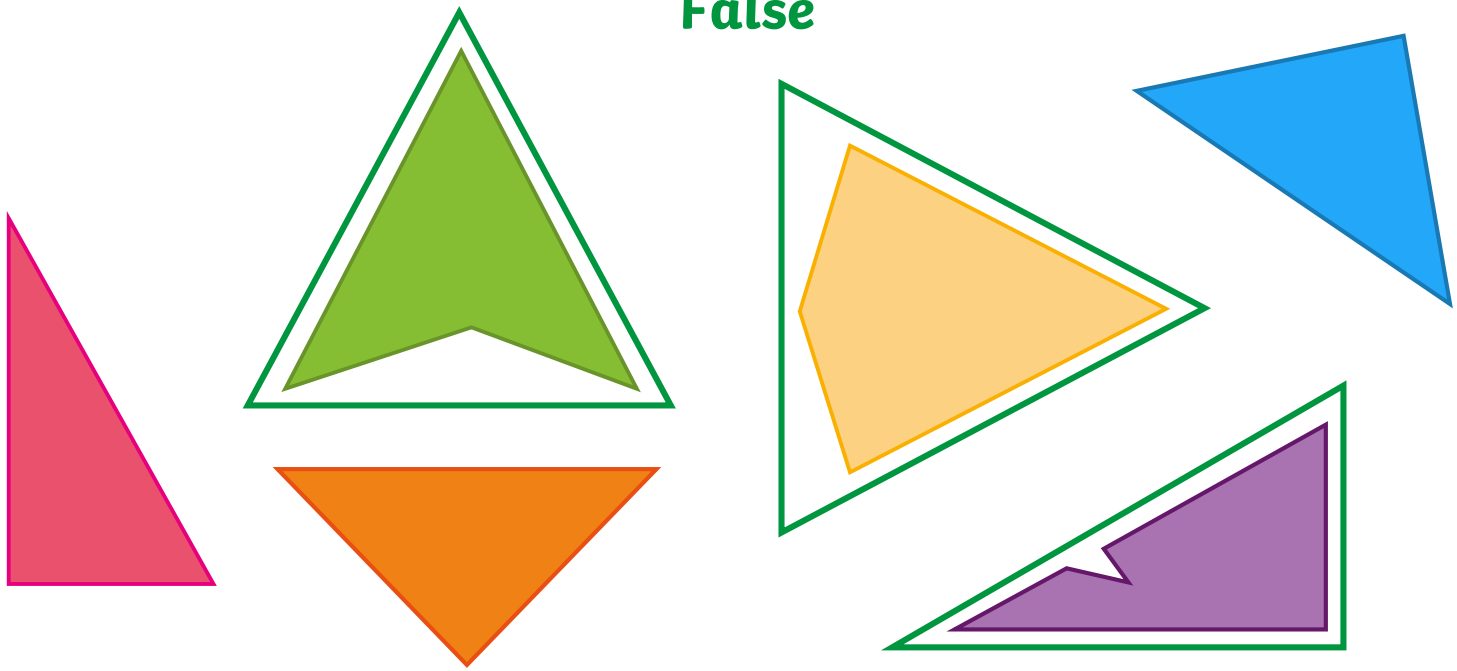
The sides of squares are the same length.

The sides of this rectangle are not the same length.

True or false?

These shapes are all triangles.

False



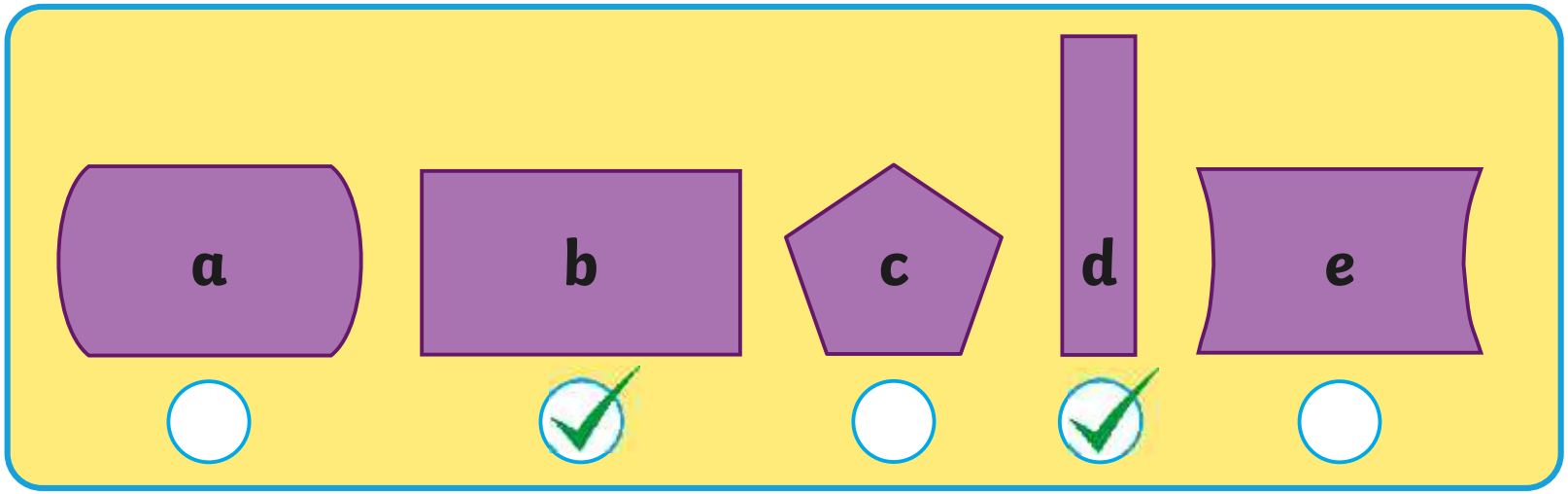
Can you explain why?

Triangles have 3 straight sides and 3 corners.

Some of the shapes have more sides and corners.

Find It

Why can't the other shapes be rectangles?



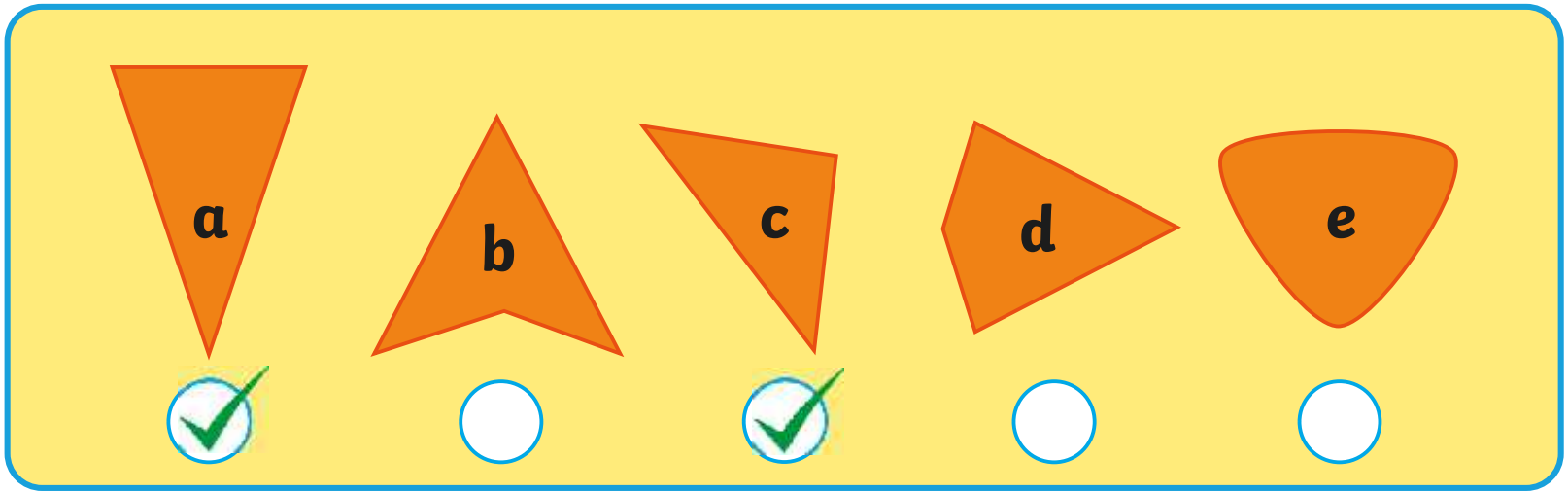
How do you know?

Shapes b and d have 4 straight sides and 4 corners.

Shape c has 5 sides and 5 corners.

Find It

Why can't the other shapes be triangles?



How do you know?

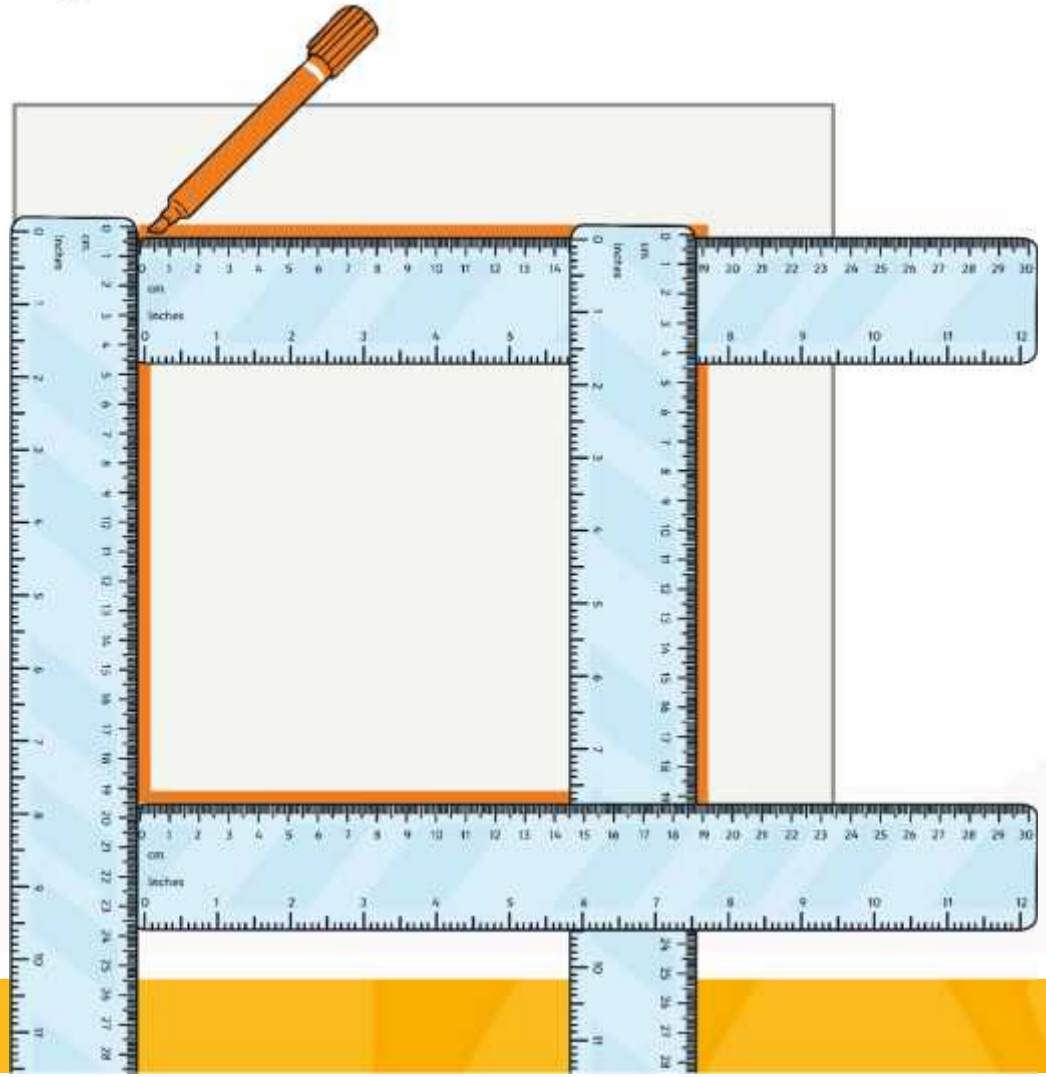
Shapes a and c have 3 straight sides and 3 corners.

Shape e has curved sides.

Shapes b and d have 4 sides and 4 corners.

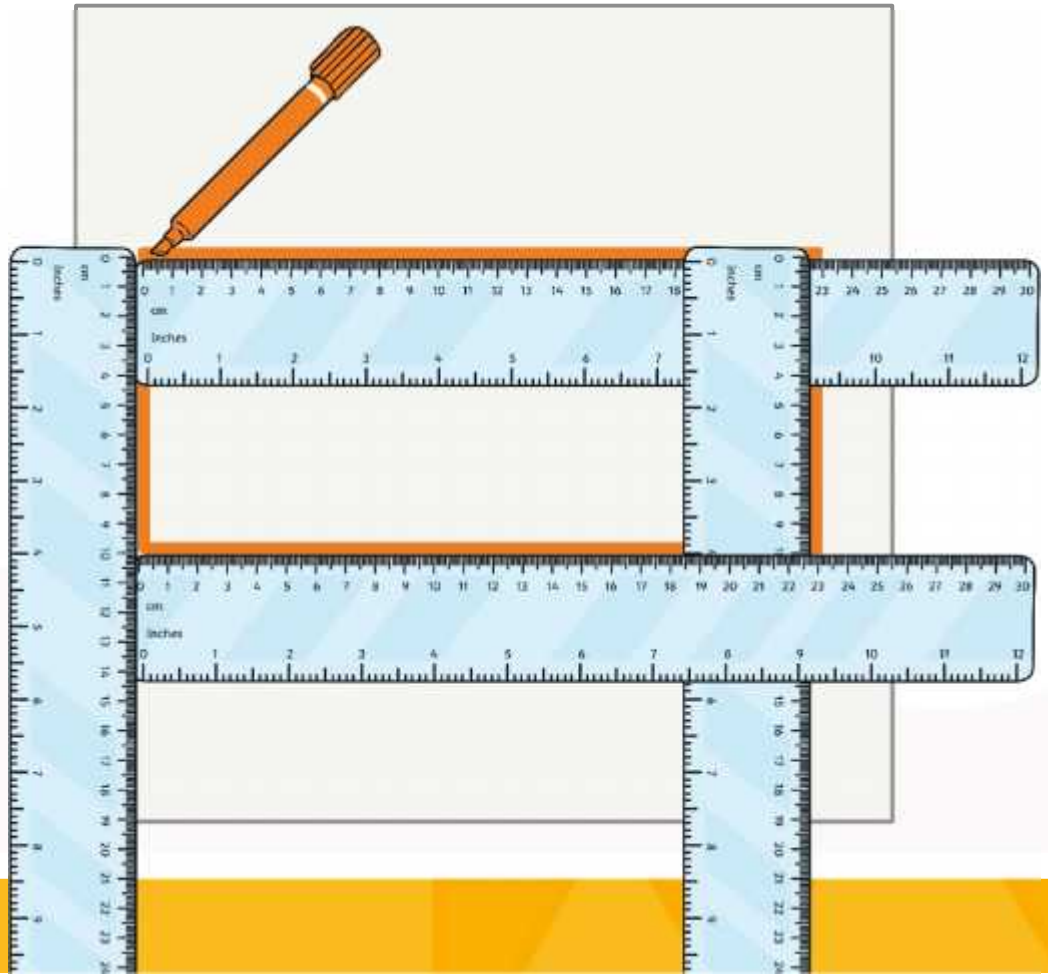
How do you draw a square?

- Draw a final straight line.



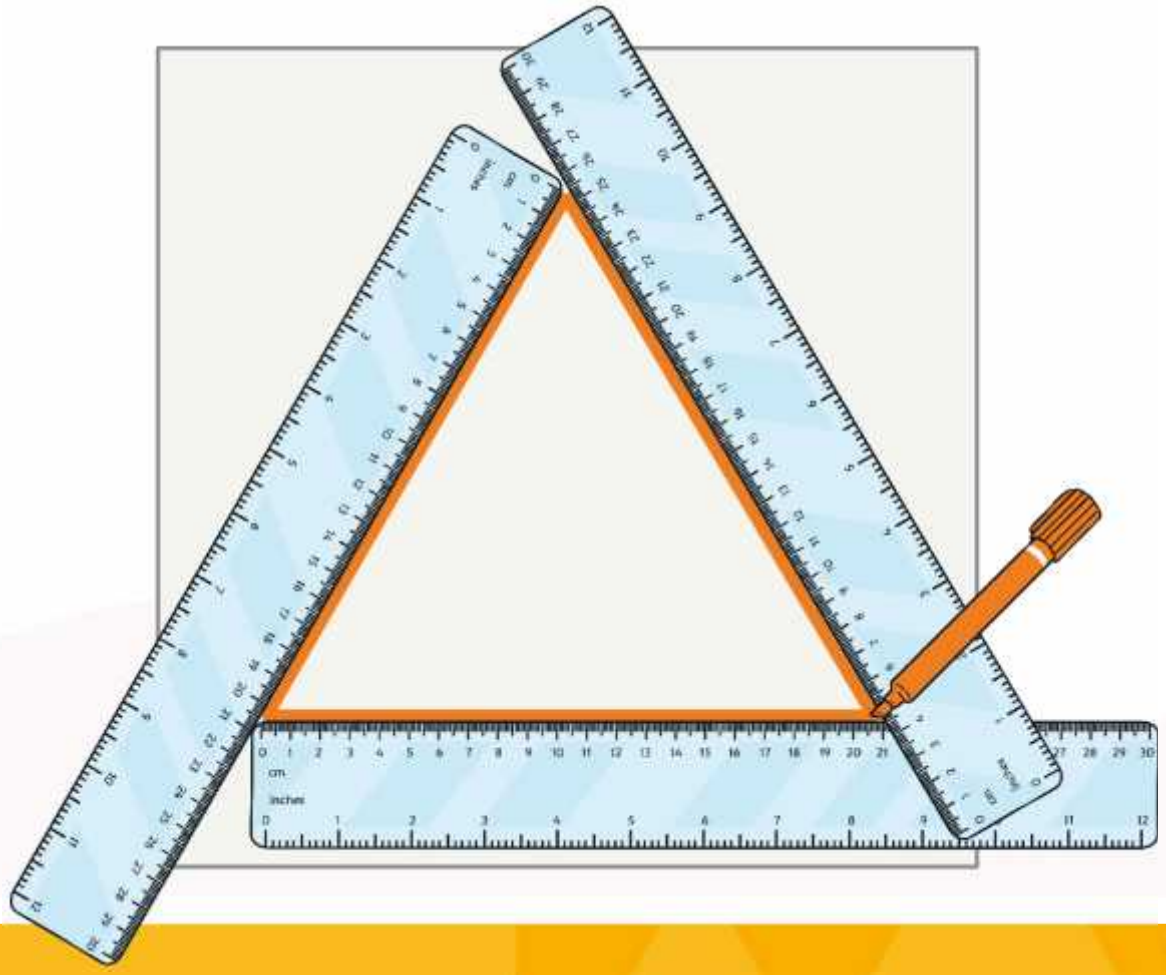
How do you draw a rectangle?

- Draw a final straight line.



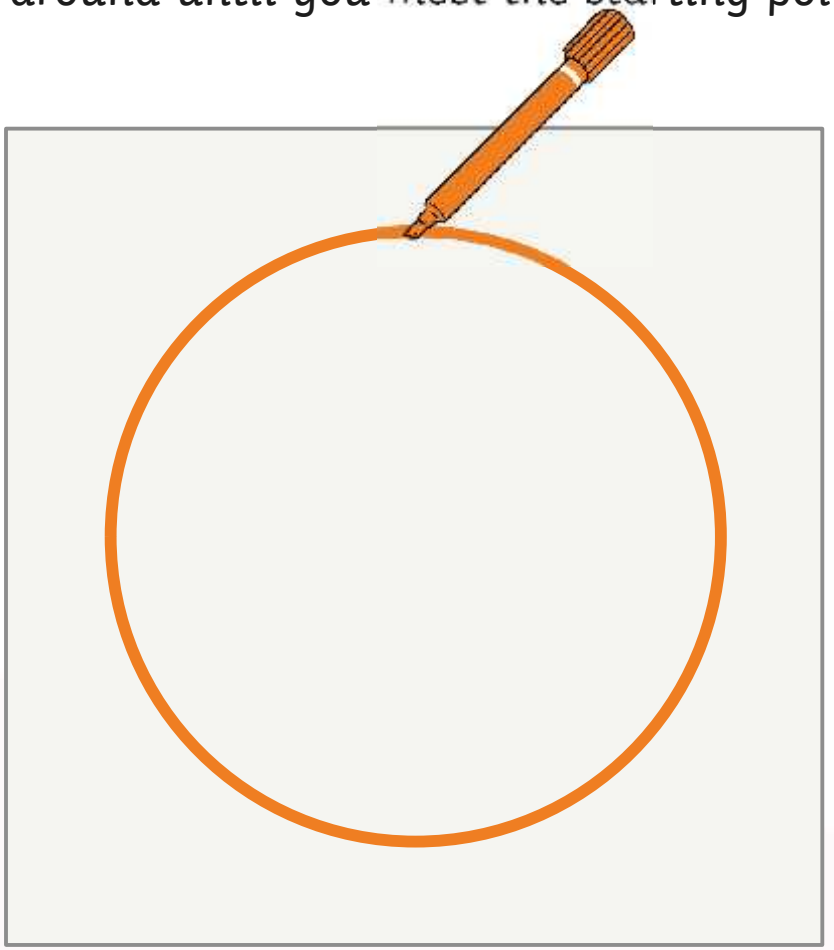
How do you draw a triangle?

- Draw a final straight line. Make sure it meets up with the other line.

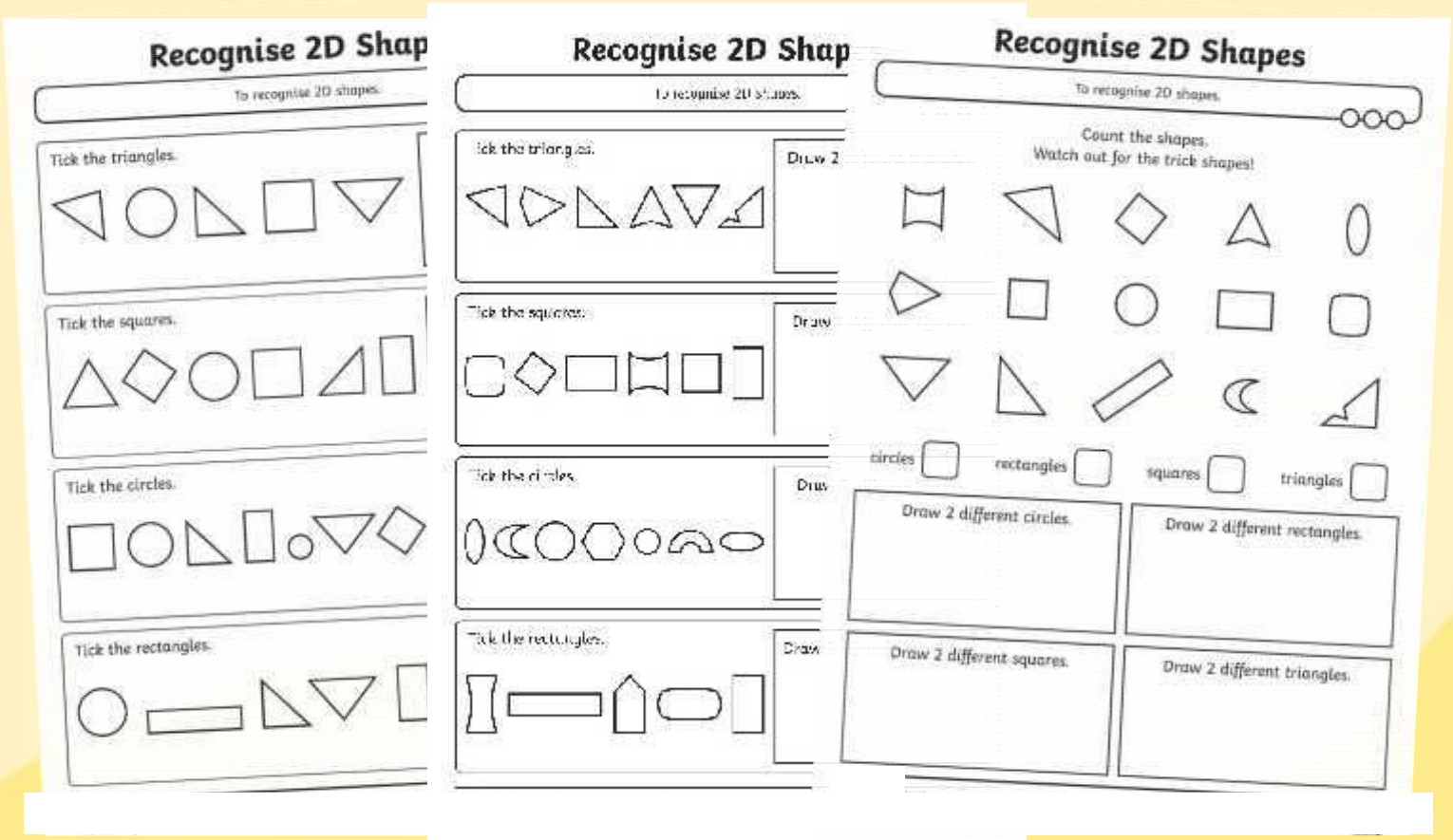


How do you draw a circle?

- Carefully draw around until you meet the starting point.

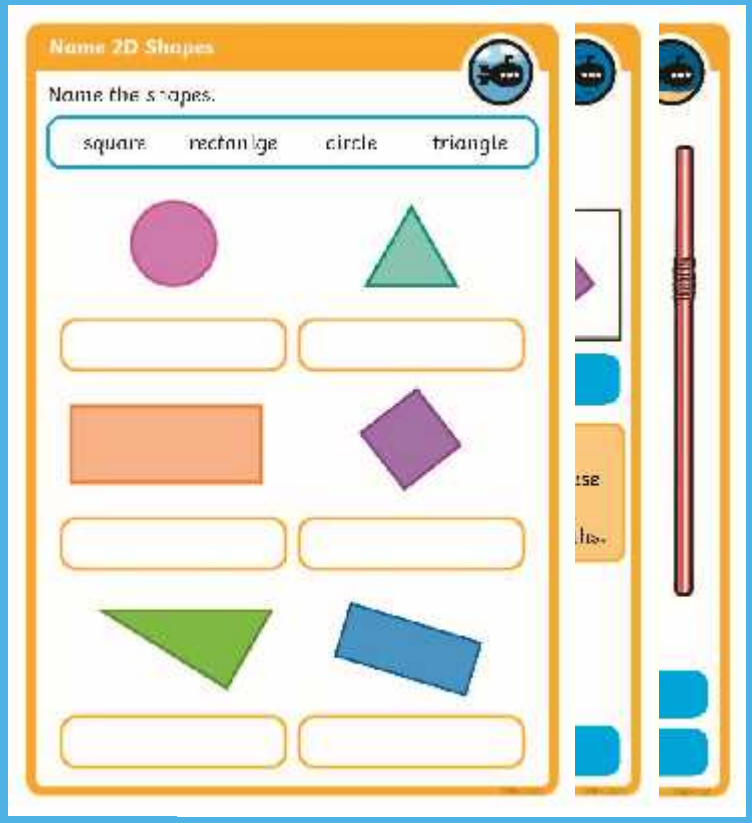


Recognise 2D Shapes



Diving into Mastery

Dive in by completing your own activity!



Change It

How would you change this shape to make it into a square?

Make the sides the same length.

Change It

How would you change this shape to make it into a rectangle?

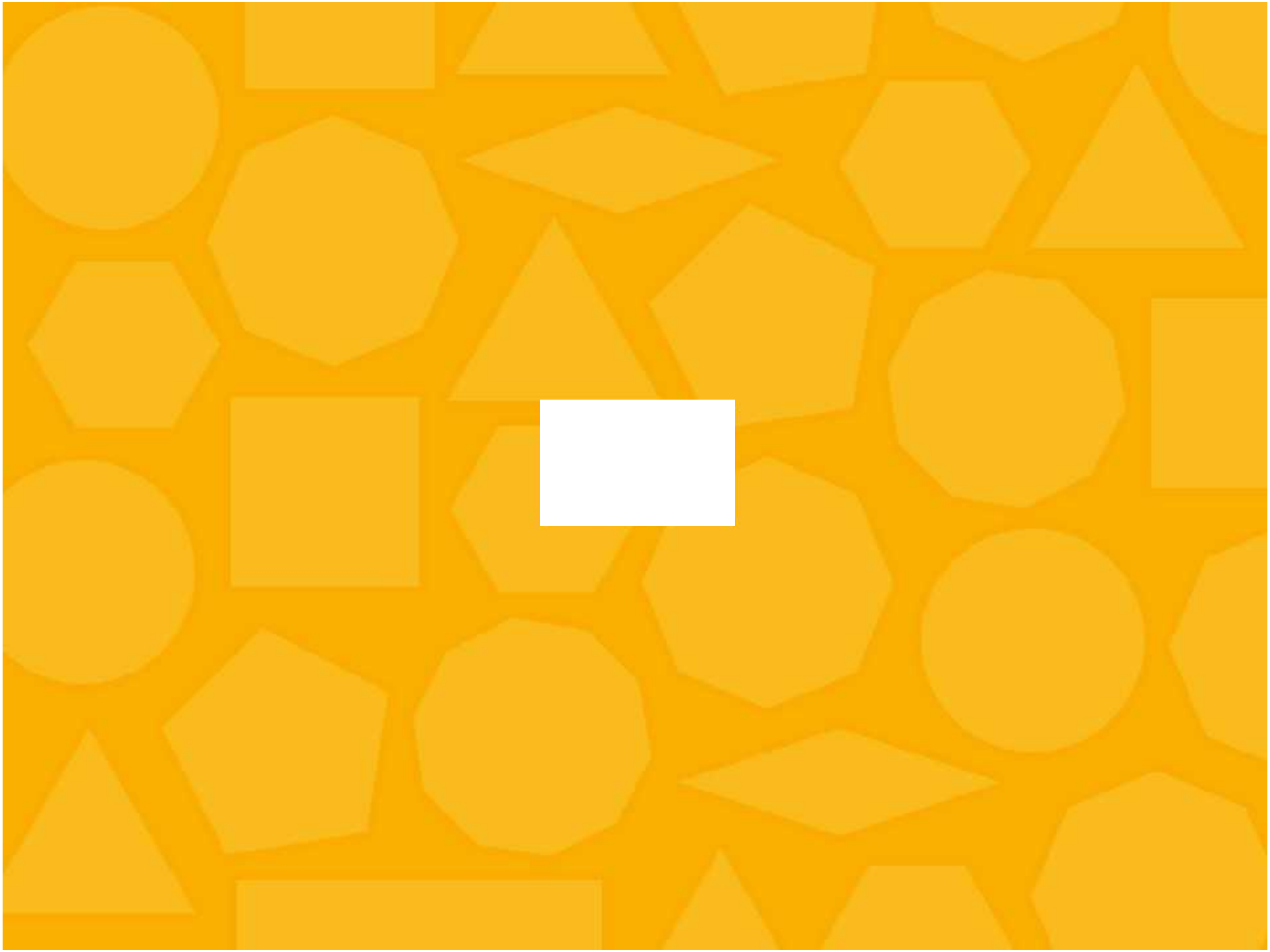
Make the sides straight.

Aim

- To recognise common 2D shapes.

Success Criteria

- I can identify common 2D shapes.
- I can draw common 2D shapes.
- I can describe common 2D shapes.



Aim: To recognise common 2D shapes.				**Date:**					
				Delivered By:			**Support:**		
Success Criteria	**Me**	**Friend**	**Teacher**	**T**	**PPA**	**S**	**I**	**AL**	**GP**
I can identify common 2D shapes.				**Notes/Evidence**					
I can draw common 2D shapes.									
I can describe common 2D shapes.									
Next Steps) _____) _____									

T	Teacher	**I**	Independent
PPA	Planning, Preparation and Assessment	**AL**	Adult Led
S	Supply	**GP**	Guided Practice

Aim: To recognise common 2D shapes.				**Date:**					
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Success Criteria	**Me**	**Friend**	**Teacher**	**T**	**PPA**	**S**	**I**	**AL**	**GP**
I can identify common 2D shapes.				**Notes/Evidence**					
I can draw common 2D shapes.									
I can describe common 2D shapes.									
Next Steps) _____) _____									

T	Teacher	**I**	Independent
PPA	Planning, Preparation and Assessment	**AL**	Adult Led
S	Supply	**GP**	Guided Practice

Recognise 2D Shapes

Adult Guidance with Question Prompts

Children recognise common 2D shapes and describe their properties. Here, children are presented with a collection of 2D shapes shown in different orientations. Children then match descriptions with a triangle, square and rectangle. It would be helpful if children had 2D shapes to handle to help them investigate the properties closely.

Can you read the shape names?

What can you tell me about squares?

Why are squares a special kind of rectangle?
(The lengths of the sides are the same.)

How many squares can you count in the picture?

How many other rectangles can you see? Does it matter which way they are turned?

Can you see any circles? What if it was a different size or colour?

What do triangles always have?

How many triangles can you see in the picture?

Read the first clue.

Can I match it with the square? Why not?

Which shape does the next clue describe?

Can you prove it?

Which shape didn't have a clue?

Can you think of a way to describe it?

Recognise 2D Shapes

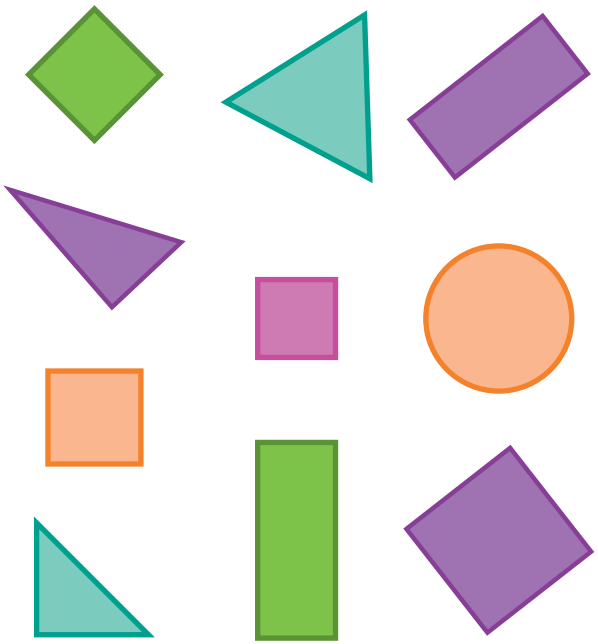
Find and count the 2D shapes.

square ☐

rectangle ☐

circle ☐

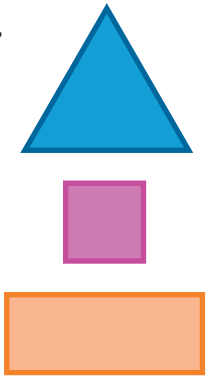
triangle ☐



Match the 2D shapes with the clues.

The sides are not all the same length.

This shape has 3 corners.



Which shape didn't have a clue?

Recognise 2D Shapes

Adult Guidance with Question Prompts

Children name common 2D shapes and describe their properties. In this activity, children find the common theme within a group of shapes, identify the odd one out and explain their reasoning. Children may benefit from having a 2D shape word mat to refer to.

What can you tell me about these shapes? What is the same? What is different?

Can you spot the odd one out?

Can you explain why?

How could you put that in a sentence?

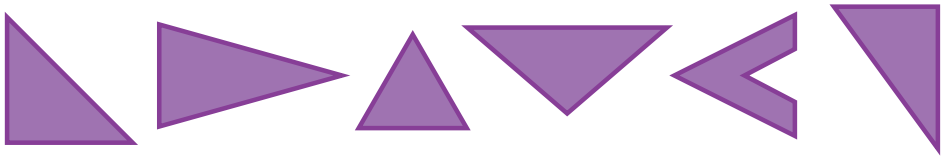
Repeat for the other shapes.

Choose a 2D shape and make a collection. Include one odd one out. Can your friend spot the odd one out?

Ask them to explain their reasoning.

Odd One Out

Tick the odd one out. Can you explain why?

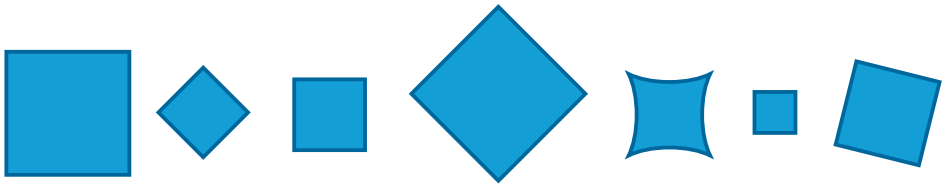


This is the odd one out because

_____

This is the odd one out because

_____



This is the odd one out because

_____

Recognise 2D Shapes

Adult Guidance with Question Prompts

Children name common 2D shapes and describe their properties. Children see part of a 2D shape and investigate what it could be. Children name the shape, explain their reasoning and explore further possibilities.

This is part of a shape.

What could it be?

Can you show me?

What couldn't it be?

Why?

Can you prove it?

Could this be part of a circle?

Why not?

Show me.

What if one side was longer than the other?

Could you still make the same shapes?

Recognise 2D Shapes

This is part of a 2D shape.

What could it be?

Name the shape and explain your reasoning.

Is there more than one possible answer?

square = **4**

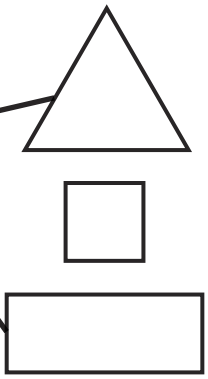
rectangle = **2**

circle = **1**

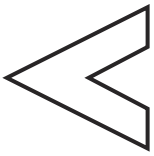
triangle = **3**

The sides are not all the same length.

This shape has 3 corners.



square



This shape is the odd one out because all the others are triangles and this isn't because it has more than three sides and corners.

This shape is the odd one out because all the others are rectangles and this isn't because it has curved sides.

This shape is the odd one out because all the others are squares and this isn't because it has curved sides.

Multiple answers possible, for example:
square
rectangle
triangle

Children should explain their answer using the understanding that the shape has two straight edges.

Recognise 2D Shapes

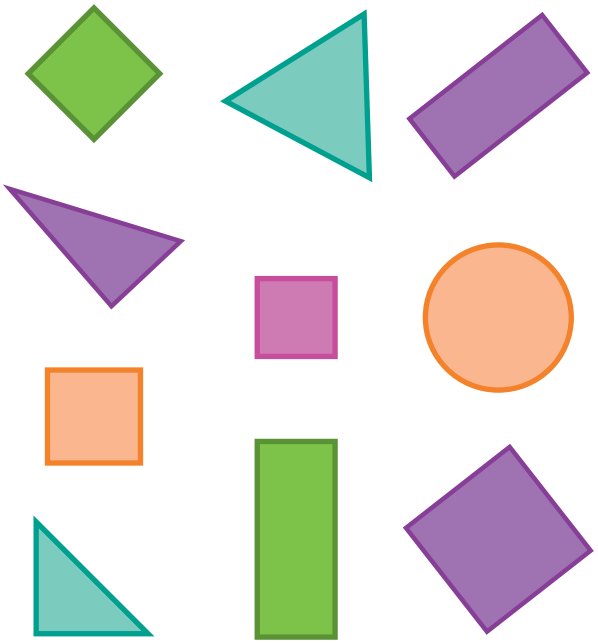
Find and count the 2D shapes.

square

rectangle

circle

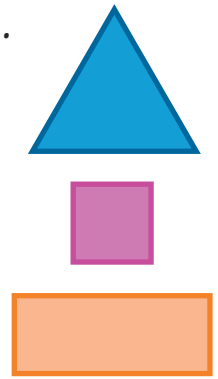
triangle



Match the 2D shapes with the clues.

The sides are not all the same length.

This shape has 3 corners.



Which shape didn't have a clue?

Recognise 2D Shapes

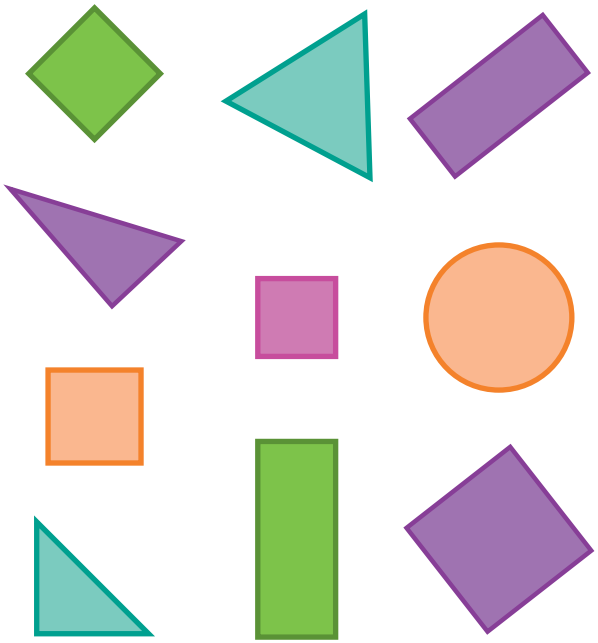
Find and count the 2D shapes.

square

rectangle

circle

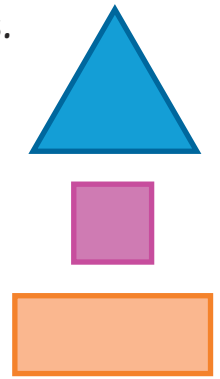
triangle



Match the 2D shapes with the clues.

The sides are not all the same length.

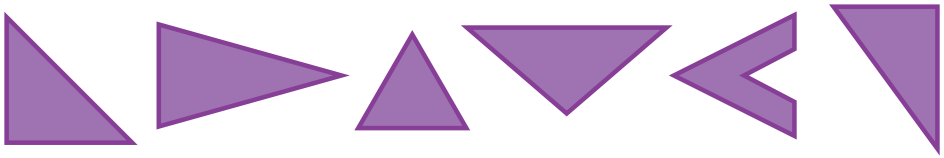
This shape has 3 corners.



Which shape didn't have a clue?

Odd One Out

Tick the odd one out. Can you explain why?

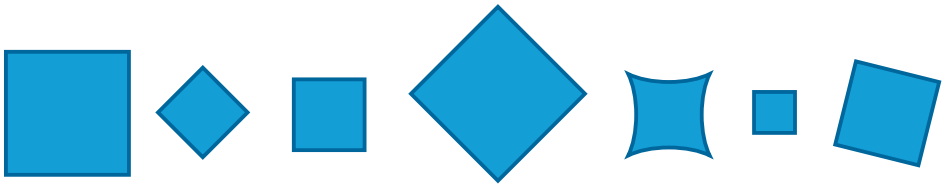


This is the odd one out because

_____

This is the odd one out because

_____



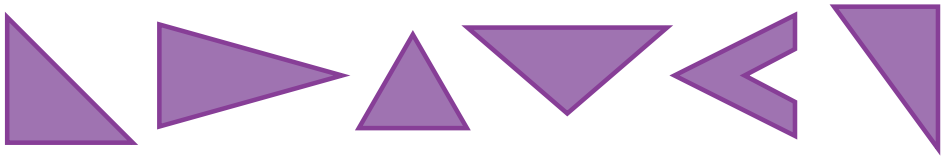
This is the odd one out because

_____

Recognise 2D Shapes

Odd One Out

Tick the odd one out. Can you explain why?

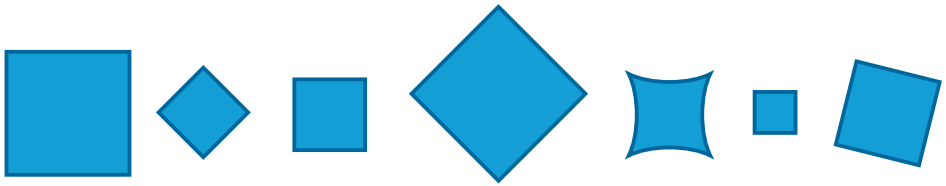


This is the odd one out because

_____

This is the odd one out because

_____



This is the odd one out because

_____

Recognise 2D Shapes

This is part of a 2D shape.

What could it be?

Name the shape and explain your reasoning.

Is there more than one possible answer?

Recognise 2D Shapes

This is part of a 2D shape.

What could it be?

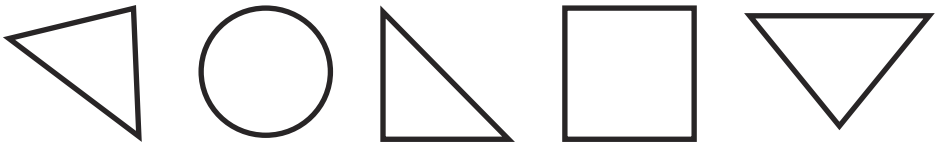
Name the shape and explain your reasoning.

Is there more than one possible answer?

Recognise 2D Shapes

To recognise 2D shapes.

Tick the triangles.



Draw a triangle.

Tick the squares.

Draw a square.

Tick the circles.

Draw a circle.

Tick the rectangles.

Draw a rectangle.

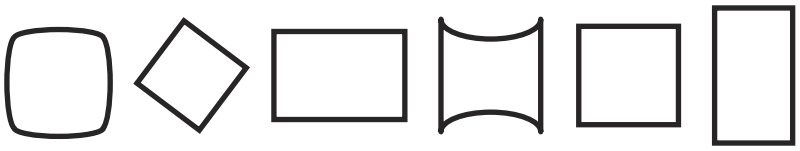
Recognise 2D Shapes

To recognise 2D shapes.

Tick the triangles.

Draw 2 different triangles.

Tick the squares.

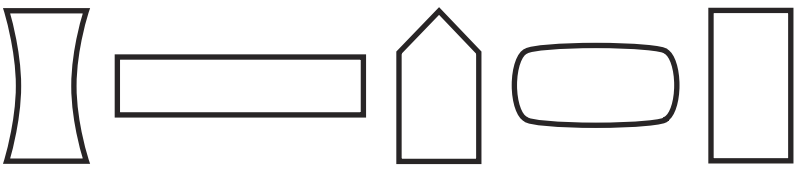


Draw 2 different squares.

Tick the circles.

Draw 2 different circles.

Tick the rectangles.

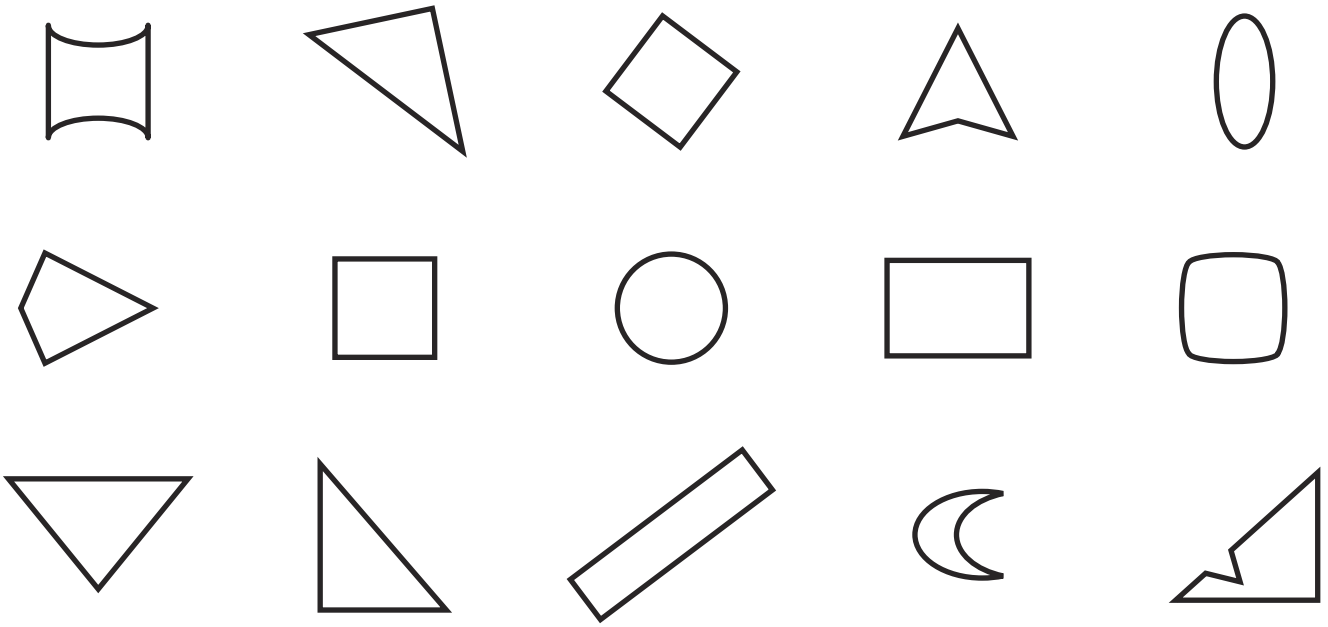


Draw 2 different rectangles.

Recognise 2D Shapes

To recognise 2D shapes.

Count the shapes.
Watch out for the trick shapes!



circles ☐ rectangles ☐ squares ☐ triangles ☐

Draw 2 different circles.

Draw 2 different rectangles.

Draw 2 different squares.

Draw 2 different triangles.

Answers

Tick the triangles.

Draw a triangle.

Children draw representations of triangles with 3 corners and 3 straight sides.

Tick the squares.

Draw a square.

Children draw representations of squares with 4 corners and 4 straight sides of the same length.

Tick the circles.

Draw a circle.

Children draw representations of a circle.

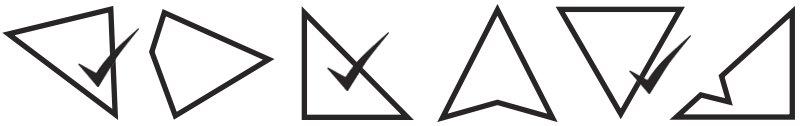
Tick the rectangles.

Draw a rectangle.

Children draw representations of rectangles with 4 corners and 4 straight sides.

Answers

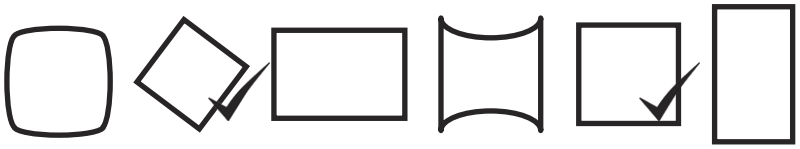
Tick the triangles.



Draw 2 different triangles.

Children draw representations of triangles with 3 corners and 3 straight sides.

Tick the squares.



Draw 2 different squares.

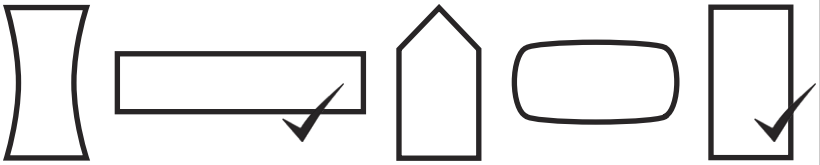
Children draw representations of squares with 4 corners and 4 straight sides of the same length.

Tick the circles.

Draw 2 different circles.

Children draw representations of a circle.

Tick the rectangles.

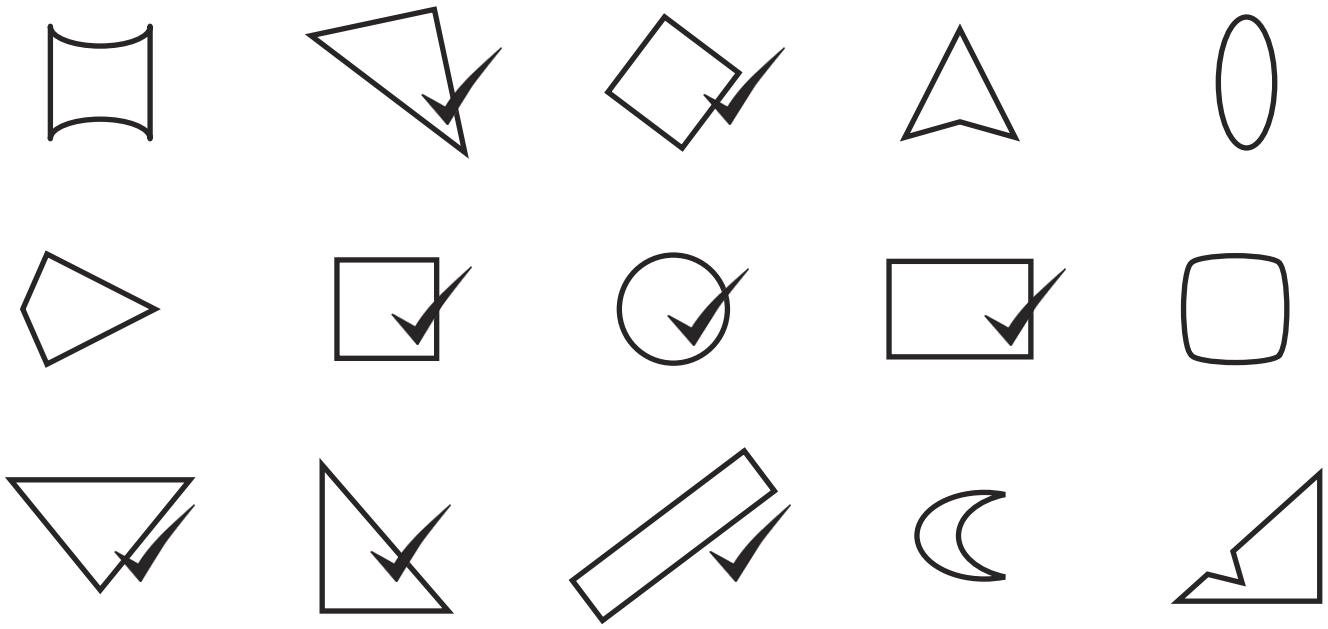


Draw 2 different rectangles.

Children draw representations of rectangles with 4 corners and 4 straight sides.

Answers

Count the shapes.
Watch out for the trick shapes!



circles **1** rectangles **2** squares **2** triangles **3**

Draw 2 different circles.

Children draw representations of a circle.

Draw 2 different rectangles.

Children draw representations of rectangles with 4 corners and 4 straight sides.

Draw 2 different squares.

Children draw representations of squares with 4 corners and 4 straight sides of the same length.

Draw 2 different triangles.

Children draw representations of triangles with 3 corners and 3 straight sides.

Properties of Shape | Recognise 2D Shapes

To recognise common 2D shapes.		
I can identify common 2D shapes.		
I can draw common 2D shapes.		
I can describe common 2D shapes.		

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