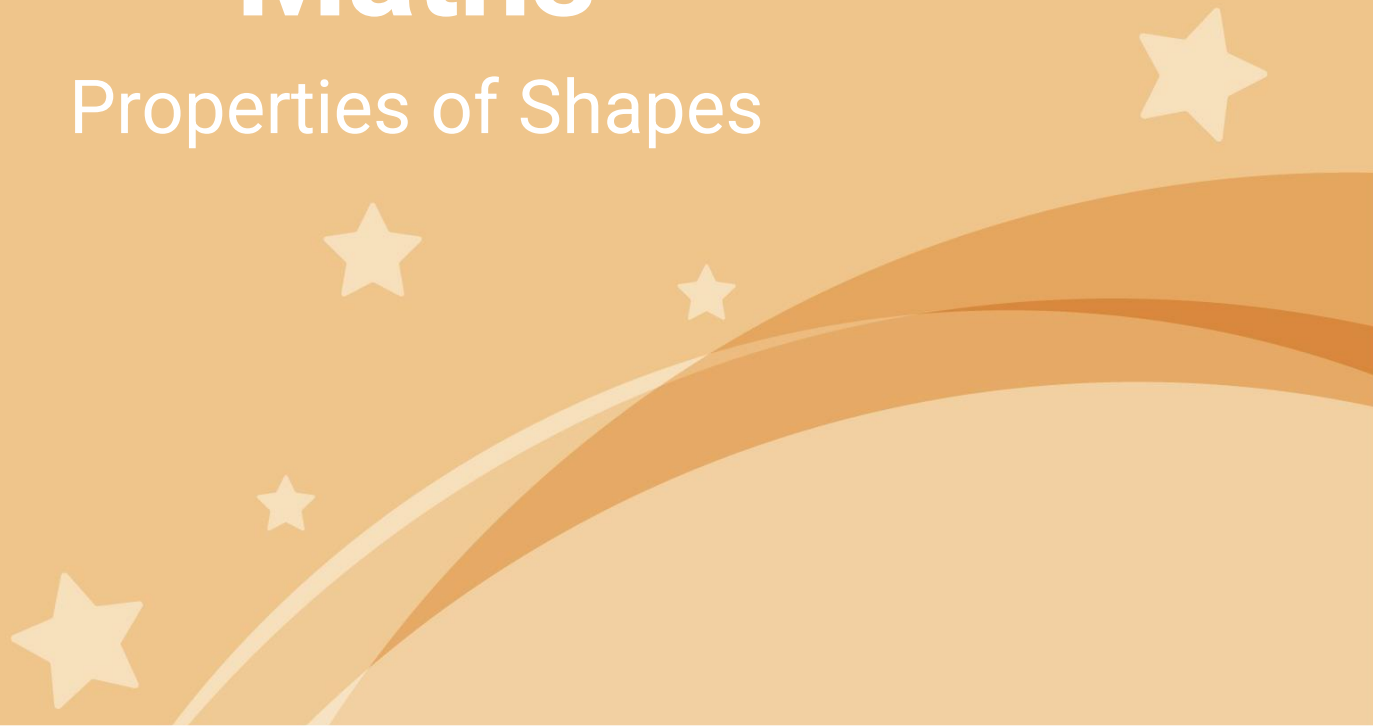




Maths

Properties of Shapes



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 includes a plan, presentation, differentiated activity sheets and Living into Mastery reasoning and problem-solving skills. 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 includes activity sheets and Living into Mastery activity cards to provide further opportunities for problem-solving skills. 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 reasoning 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.



Make 2D Shape Pictures



twinkl

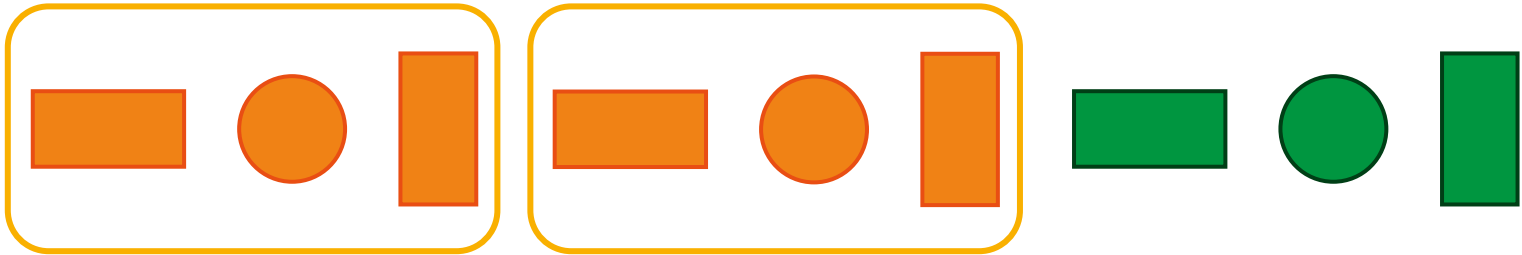
Aim

- To investigate 2D shape pictures.

Success Criteria

- I can make pictures using 2D shapes.
- I can copy a picture using 2D shapes.
- I can name the 2D shapes that I use.

Can you continue this pattern?



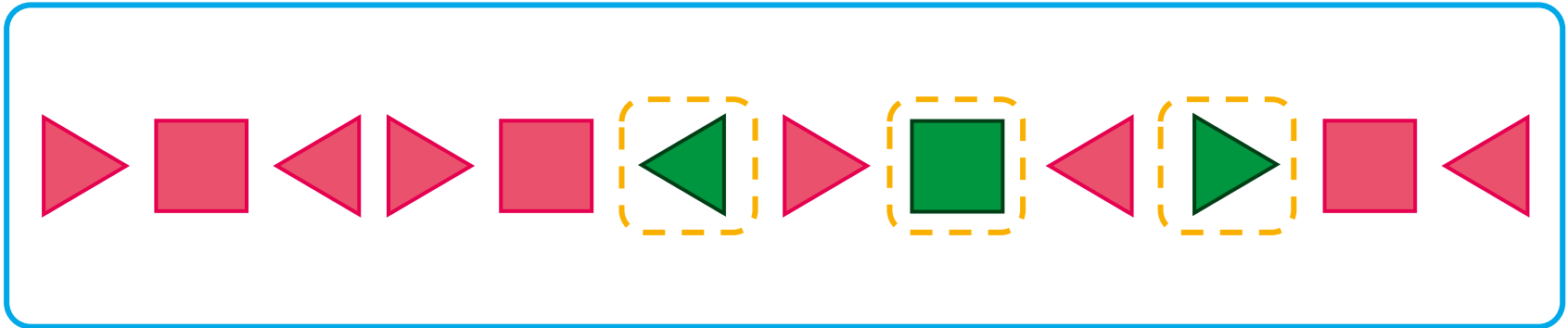
What strategies could help?

Say the pattern.

Find the core.

Which strategy worked for you?

Which shapes are missing from the pattern?



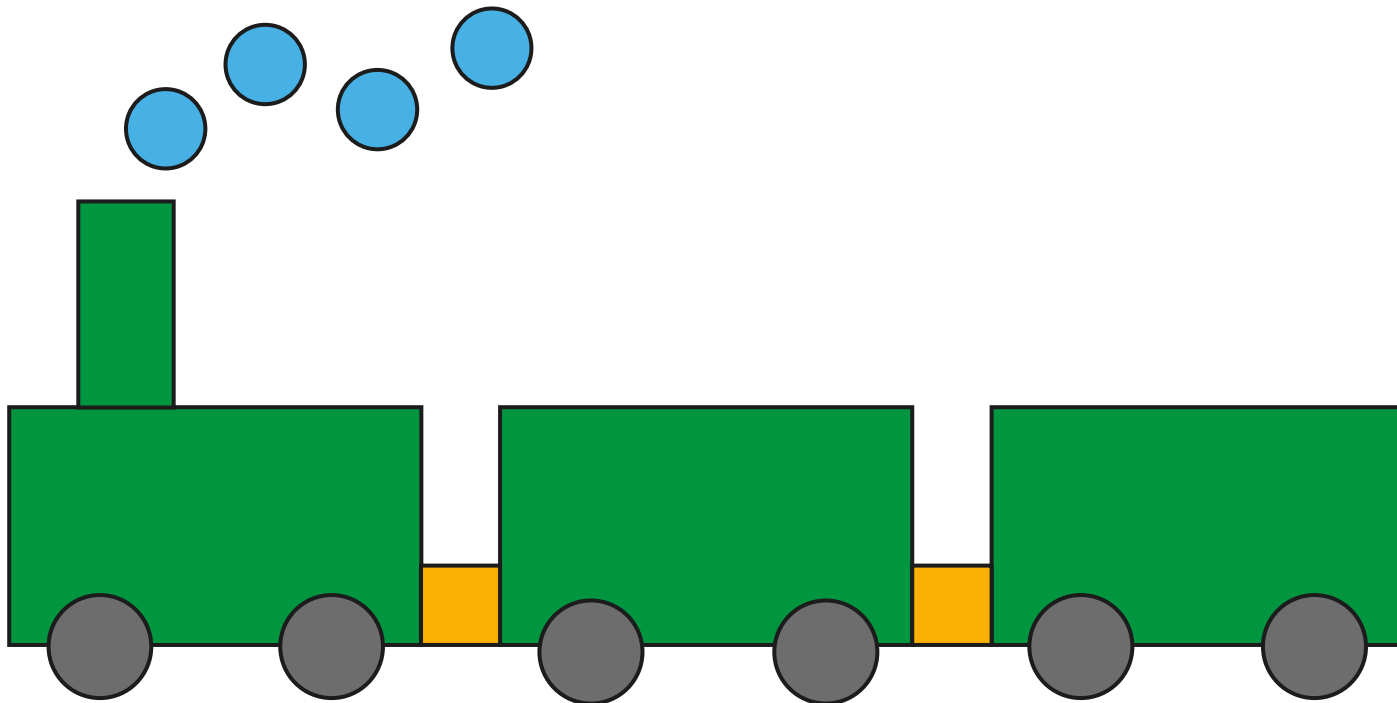
What can you do to find out?

Say the pattern.

Find the core.

What shapes can you see?

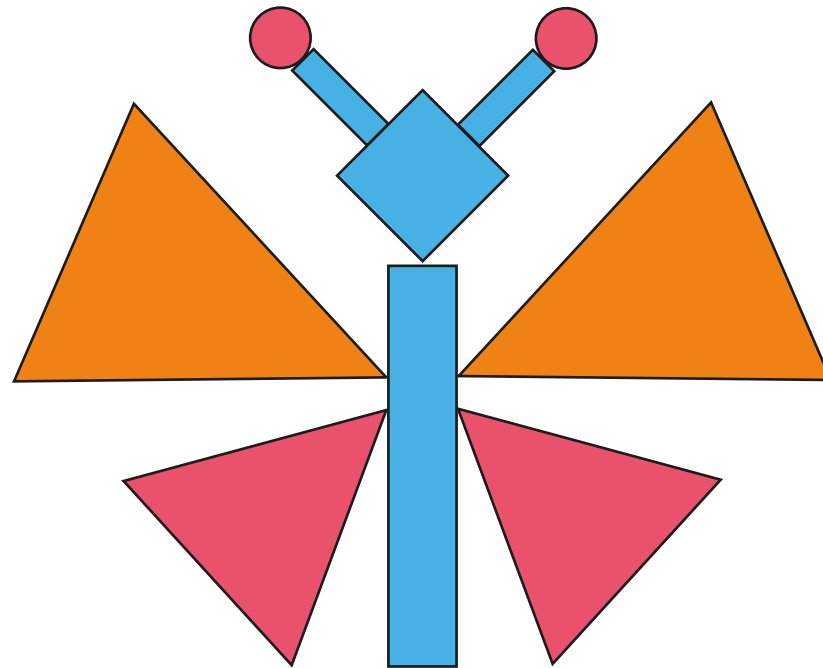
What picture do you think the shapes will make?



A train.

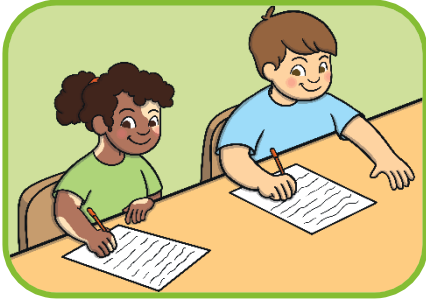
What shapes can you see?

What picture do you think the shapes will make?

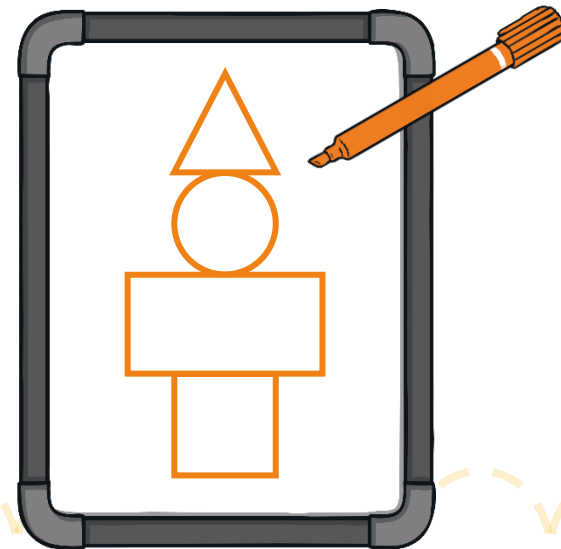
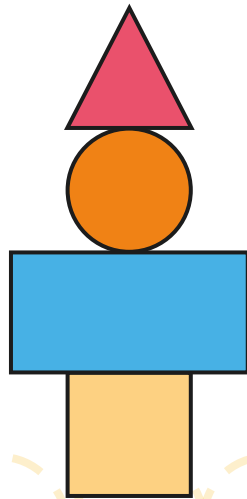


A butterfly.

These learning partners are making 2D shape pictures.



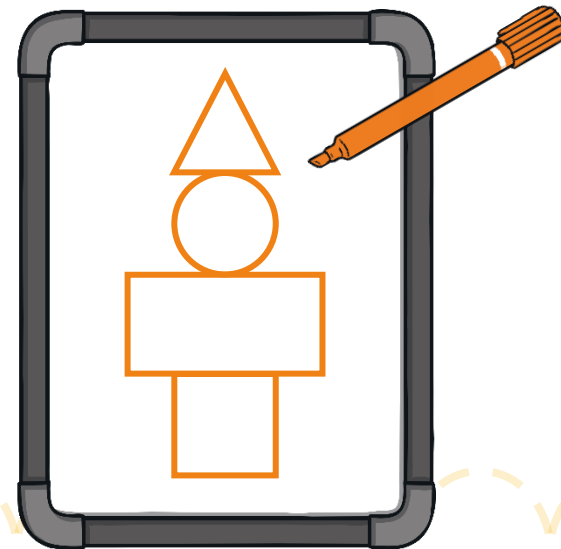
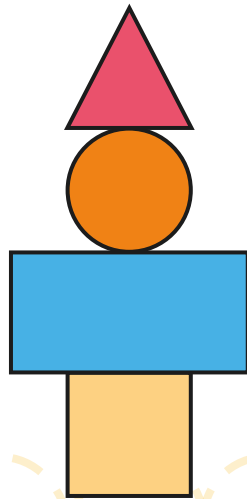
They can use 2D shapes or draw shapes on a whiteboard.

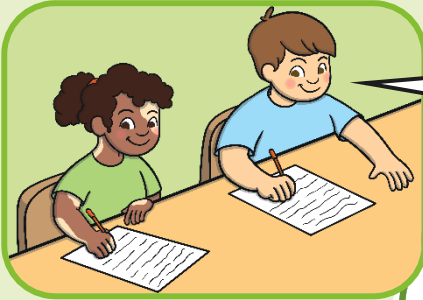


First, they think of a picture to make.

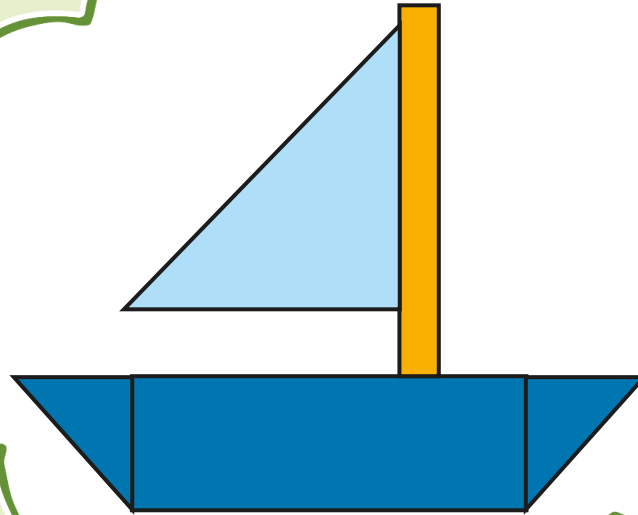


Then they take turns to place shapes until the picture is complete.





We made a boat.



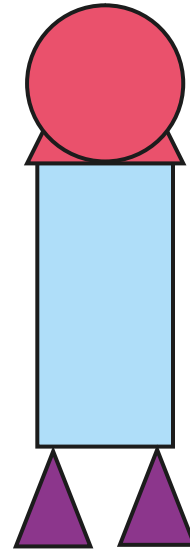
Which shapes did they use?

What picture did they make?

What could they do to improve it?



We made a rocket.



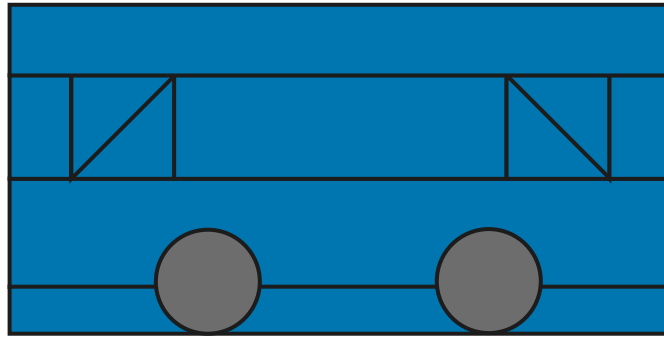
Which shapes did they use?

What picture did they make?

What could they do to improve it?

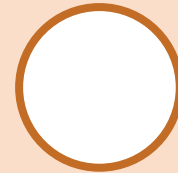


We made a car.

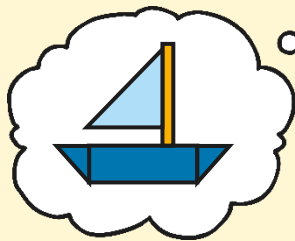


What picture did they make?

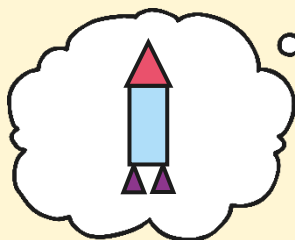
What could they do to improve it?



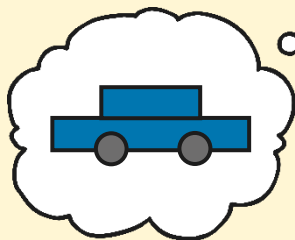
What have we learnt?



Choose the shapes carefully.



Use enough shapes to make a clear picture.



Keep it simple.
Don't use too many shapes.

Now it's your turn!



Choose a picture.

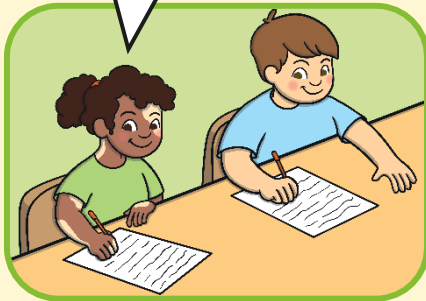


Decide which shapes you will use.



Take turns to place shapes until the picture is complete.

Look at your
classmates'
pictures.



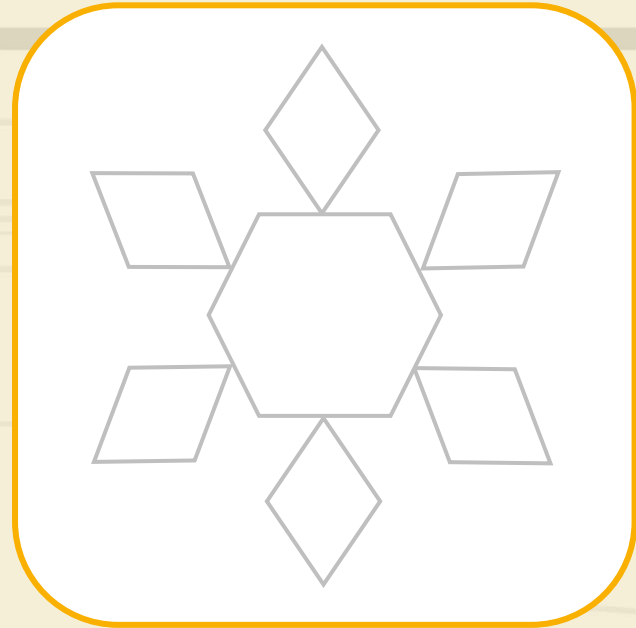
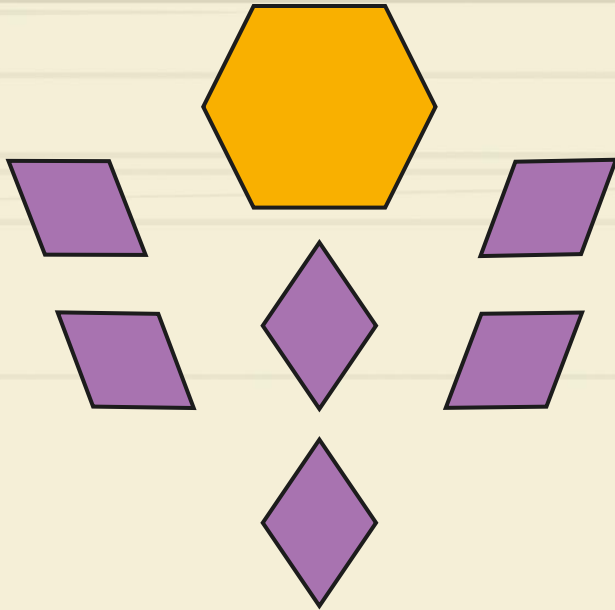
Which
shapes did
they use?



What picture
did they
make?



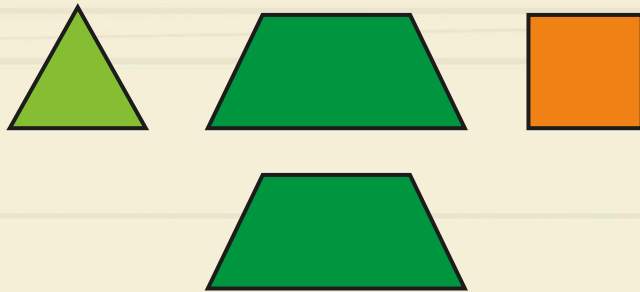
Use pattern blocks to make the picture.



What picture have we made?

A flower.

Use pattern blocks to make the picture.

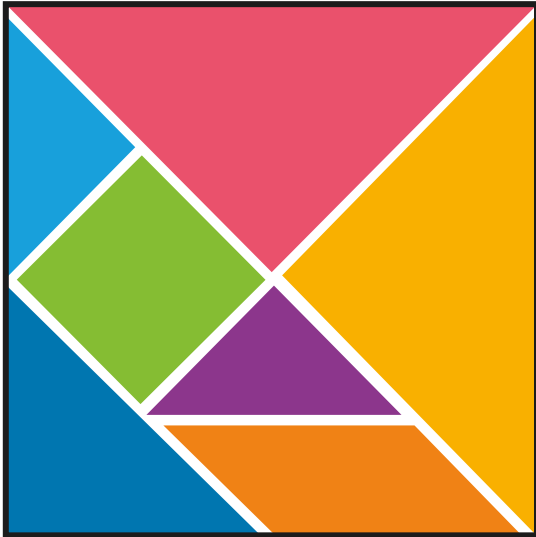


What picture have we made?

A tree.

A tangram is puzzle made from these shapes.

5 triangles



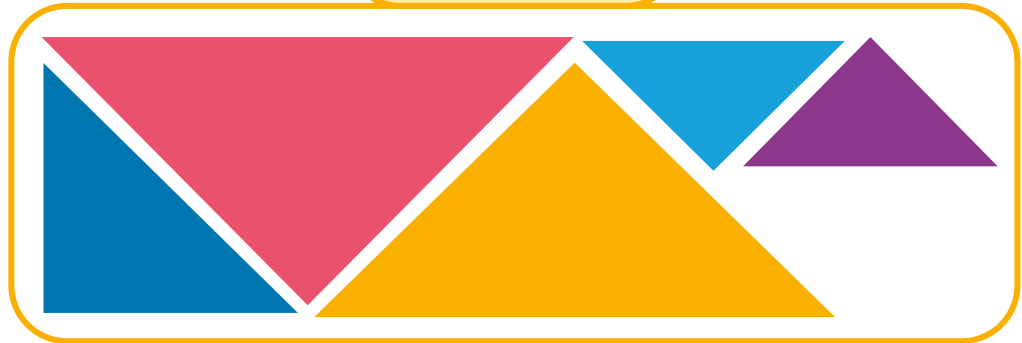
1 square

1 parallelogram

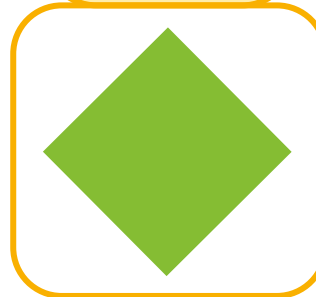
What shapes can you see?

Can you fit the shapes back in the frame?

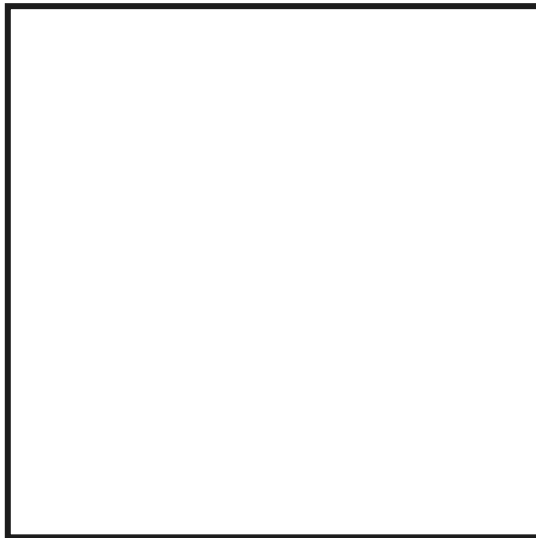
5 triangles



1 square

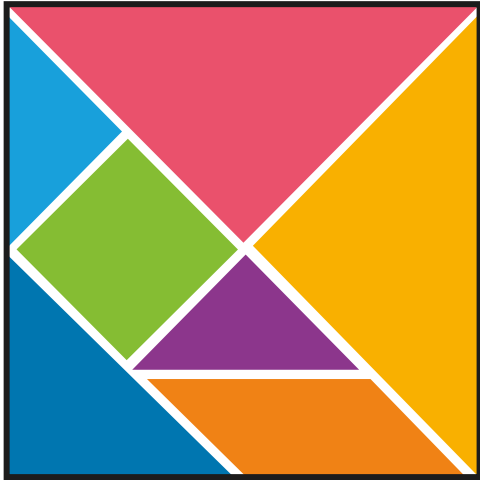


1 parallelogram



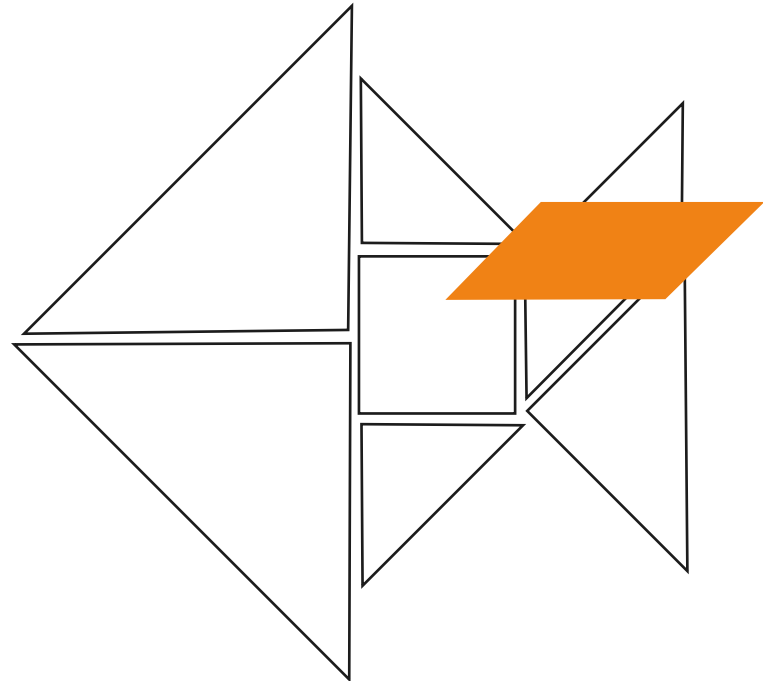
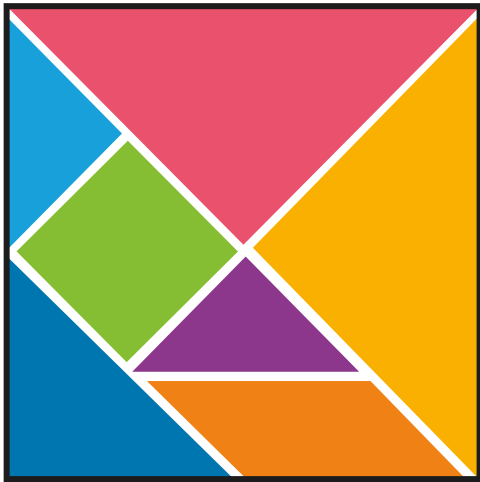
Where will you put each shape?

You can use **What can you see?** the pictures.



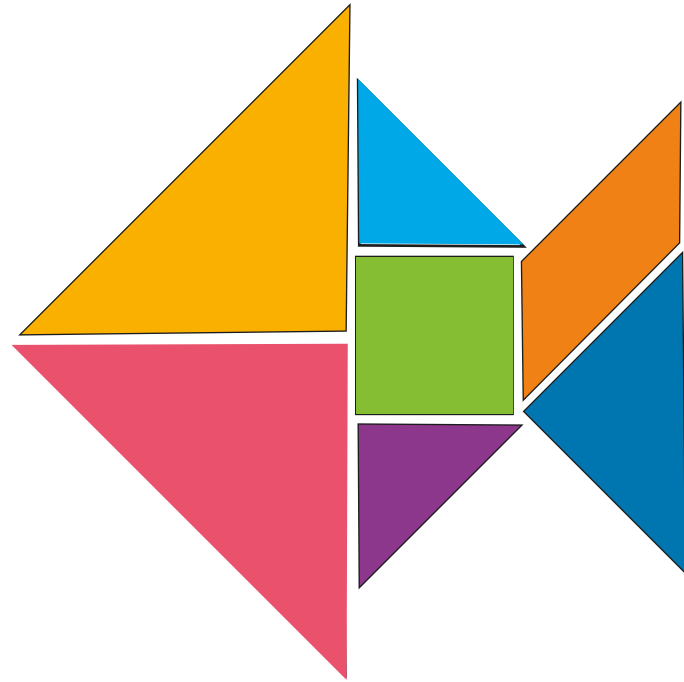
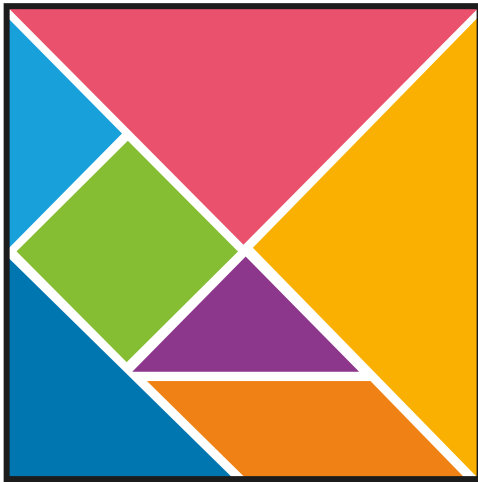
A cat.

How could you **What can you see?** like this picture?



A fish.

Or we could move the shapes like this.



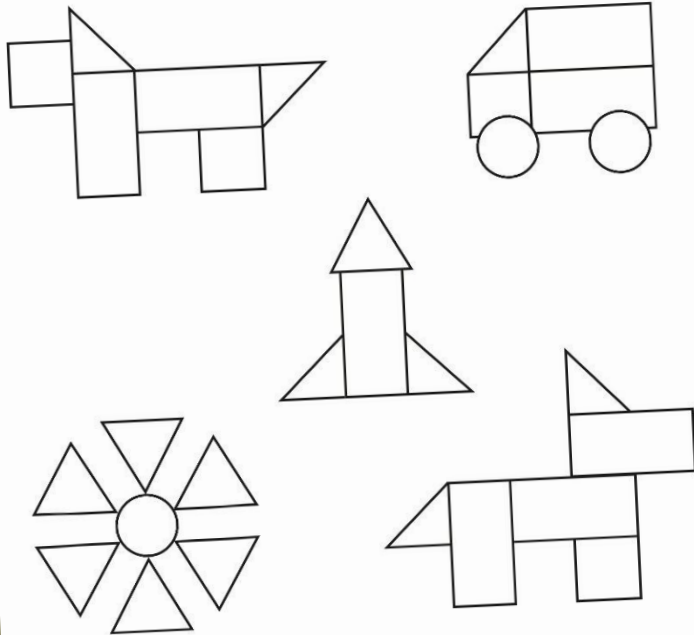
A fish.

Make 2D Shape Pictures

Make 2D Shape Pictures

To investigate 2D shape pictures.

Can you copy these pictures with 2D shapes?



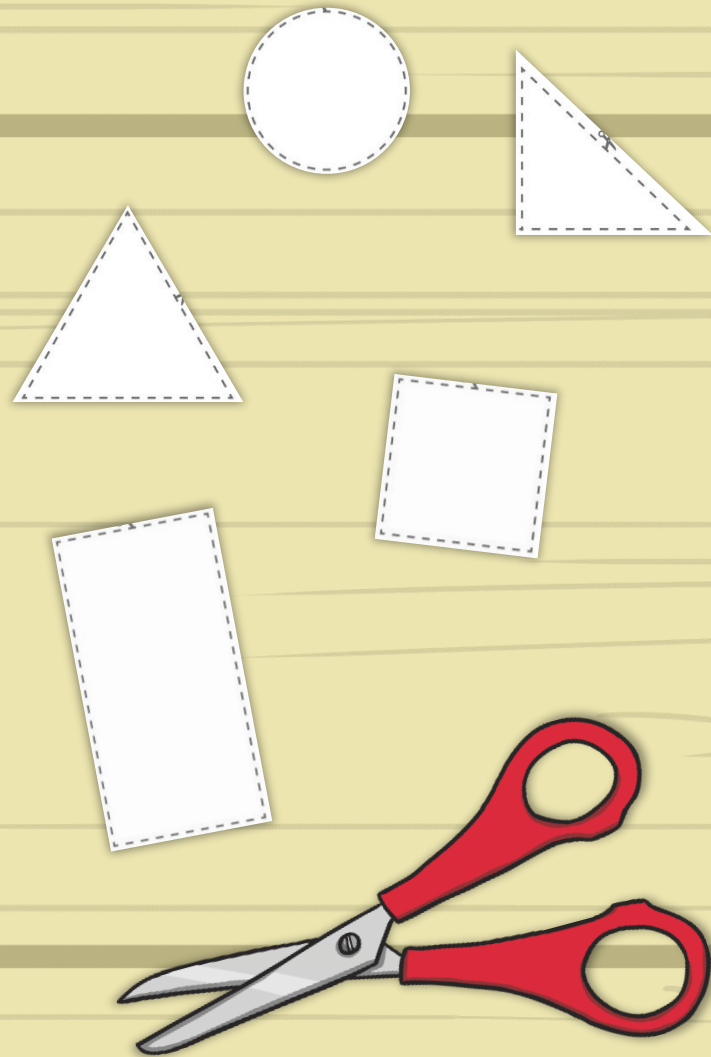
Create your own pictures with 2D shapes.

Which shapes did you use?



Maths | Properties of Shapes | 2D Shapes |
Lesson 5 of 5: Make 2D Shape Pictures

visit [twinkl.com](https://www.twinkl.com)



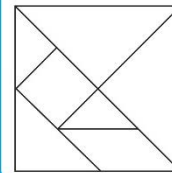
Diving into Mastery

Dive in by completing your own activity!



Make 2D Shape Pictures

Count the 2D shapes in the tangram.



1 parallelogram

square

triangles

Use the shapes from the tangram to make these pictures.



butterfly



cat



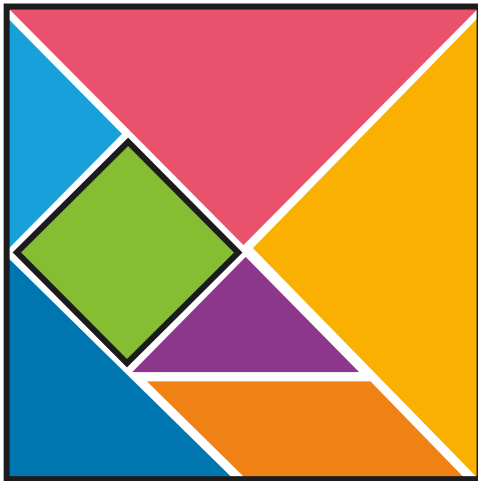
flower

Can you fit the shapes back into a square?

Can you make new pictures with the same shapes?

True or false? How do you know?
The rocket is made from all of the shapes in the tangram.

false

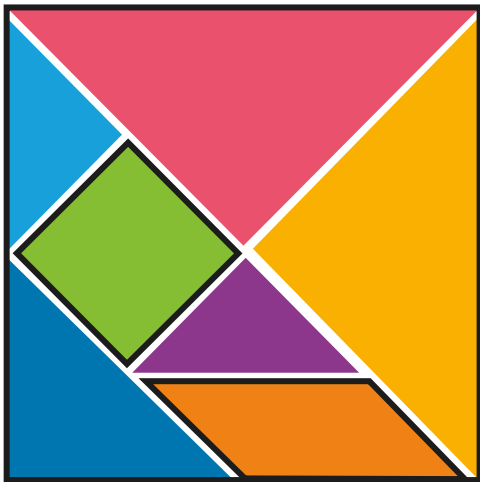


The square is missing.

True or false? How do you know?

The boxes are made from all of the shapes in the tangram.

false



The parallelogram wasn't used.

The square wasn't used.

There is an extra triangle.



Aim



- To investigate 2D shape pictures.

Success Criteria

- I can make pictures using 2D shapes.
- I can copy a picture using 2D shapes.
- I can name the 2D shapes that I use.



twinkl