



**THIRD SPACE**  
LEARNING

# Ready-to-go Lesson Slides

## Year 2

Please note:

2-D shapes and sorting hoops or similar would be needed for this lesson.

### Geometry: Properties of Shapes

### Lesson 6

Spr3

**At Third Space Learning we provide personalised online lessons from specialist maths tutors to support the target groups in your school.**

These ready-to-go slides are designed to work alongside our interventions to supplement quality first teaching and raise attainment in maths for all pupils.

To find out more about how you could use our 1-to-1 interventions year-round to boost maths progress in your school then get in touch:

020 3771 0095  
[hello@thirdspacelearning.com](mailto:hello@thirdspacelearning.com)

**Boosting maths progress through 1-to-1 conversations...**



# To sort 2-D shapes

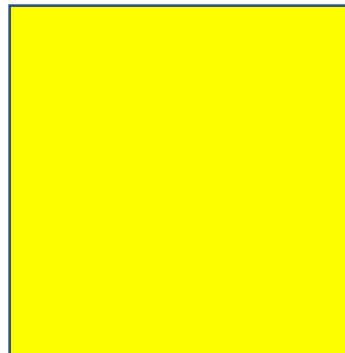
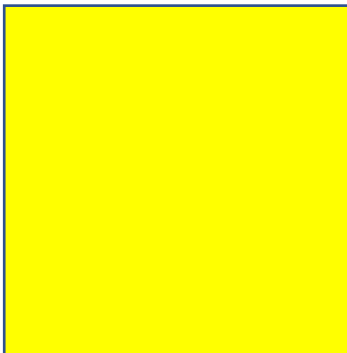
**Success Criteria:**

- ☐ I can sort 2D shapes into different groups
- ☐ I can describe how I have sorted shapes using terms like "symmetrical", "side", and "vertex".

**Starter:**

Aisha has found a vertical line of symmetry on a shape. She folded along the line of symmetry and then cut along the line.

These are the identical shapes that she now has.  
What was the shape she started with?



# To sort 2-D shapes

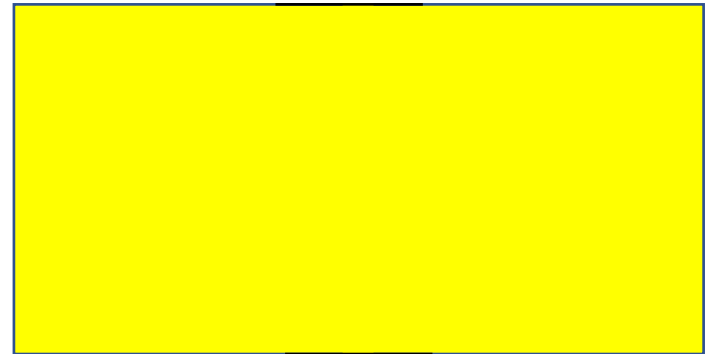
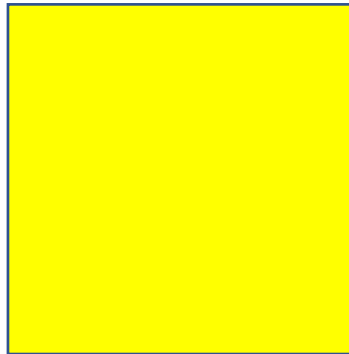
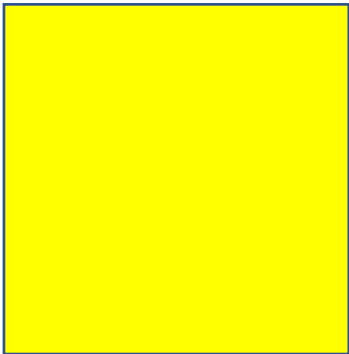
## Starter:

Aisha has found a vertical line of symmetry on a shape. She folded along the line of symmetry and then cut along the line.



These are the identical shapes that she now has. What was the shape she started with?

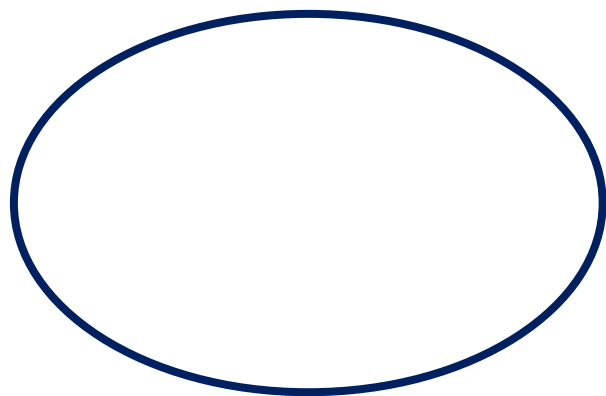
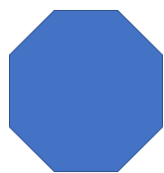
Aisha now has two identical squares.  
She started with a rectangle.



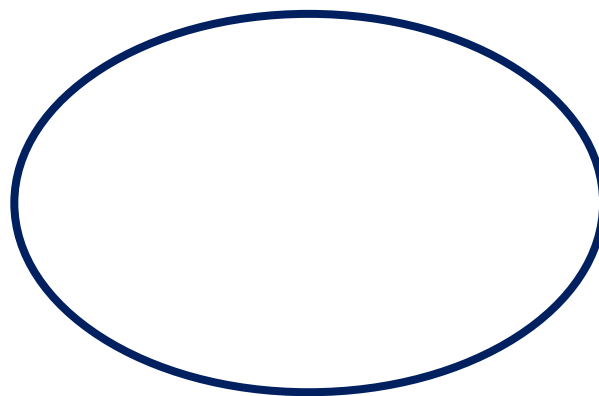
# To sort 2-D shapes

## Talking Time:

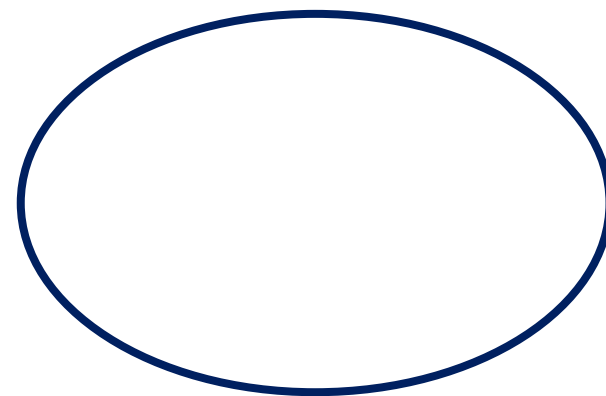
Can you sort these 2-D shapes into the correct groups?



squares



hexagons

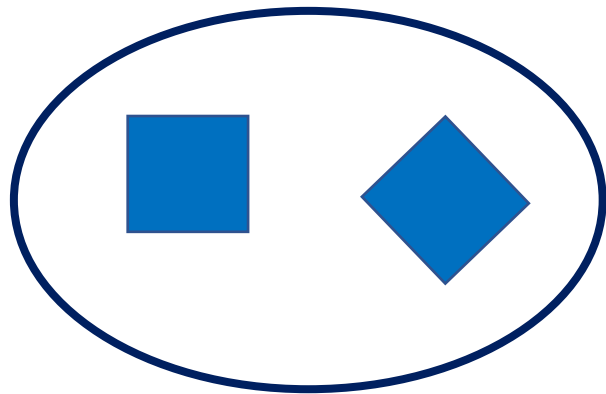


octagons

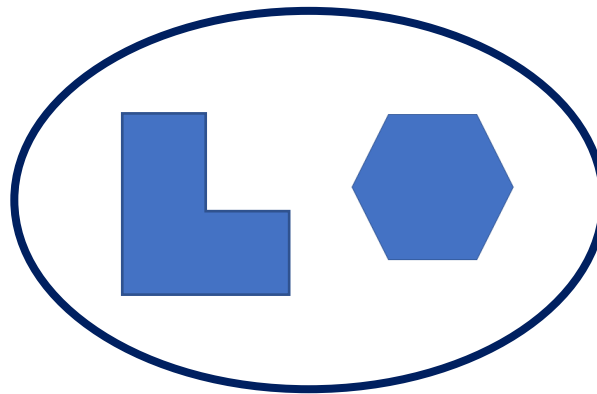
# To sort 2-D shapes

## Talking Time:

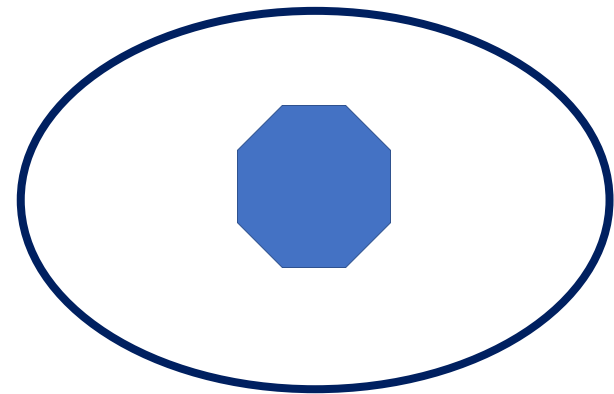
Can you sort these 2-D shapes into the correct groups?



squares



hexagons

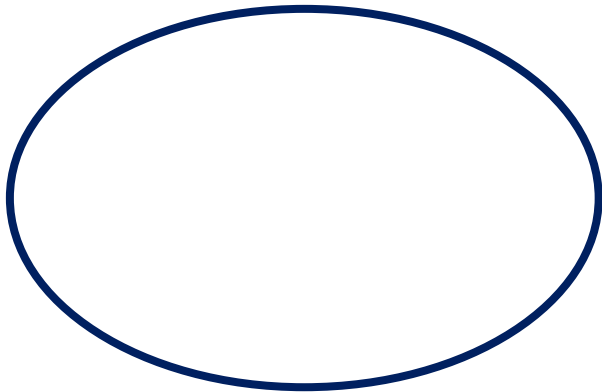


octagons

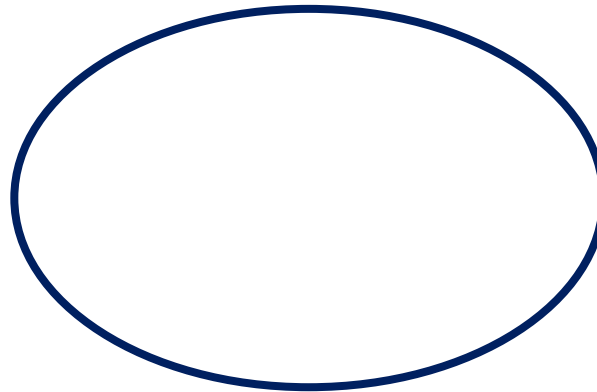
# To sort 2-D shapes

## Talking Time:

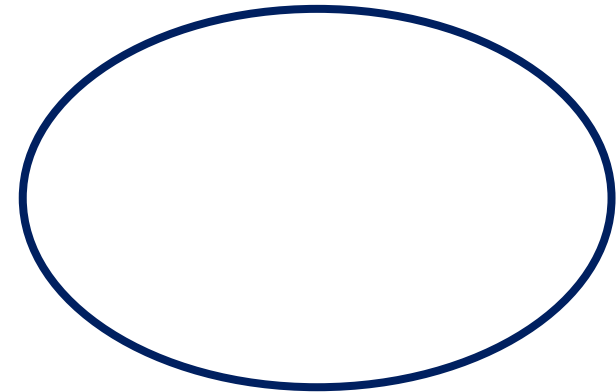
Can you sort these 2-D shapes into the correct groups?



shapes with  
4 sides



shapes with  
5 sides

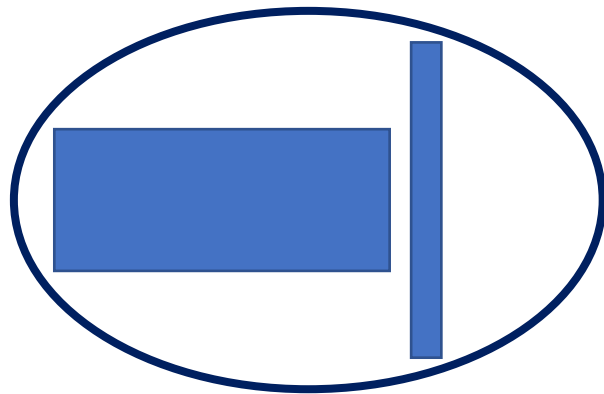


shapes with  
6 sides

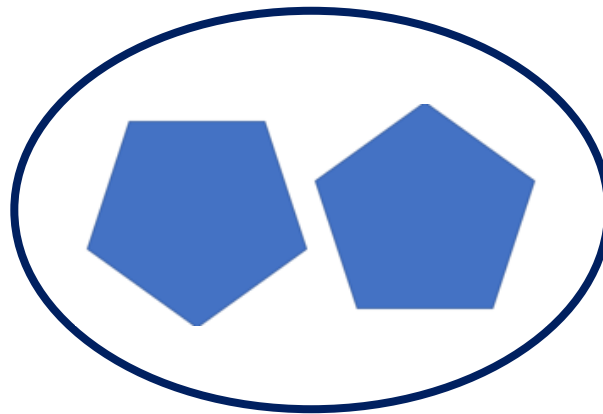
# To sort 2-D shapes

## Talking Time:

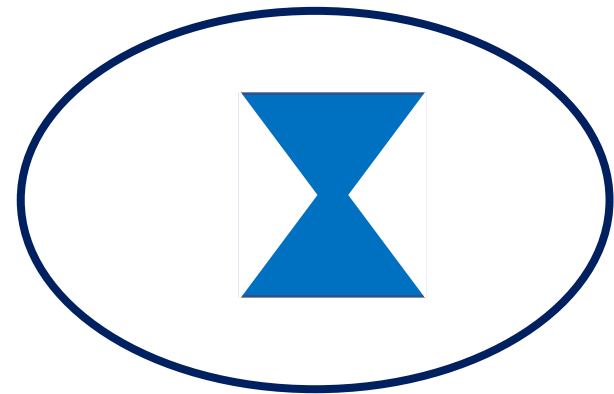
Can you sort these 2-D shapes into the correct groups?



shapes with  
4 sides



shapes with  
5 sides



shapes with  
6 sides



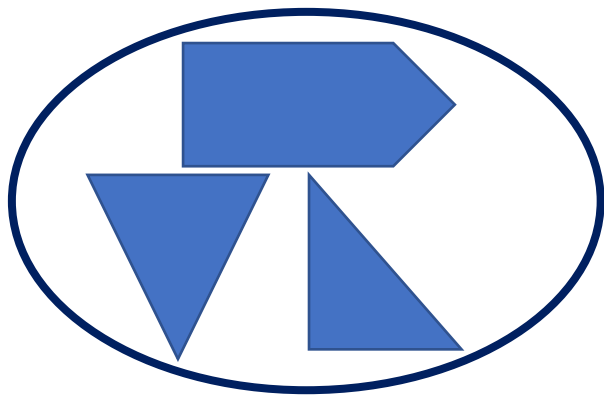
# To sort 2-D shapes

## Talking Time:

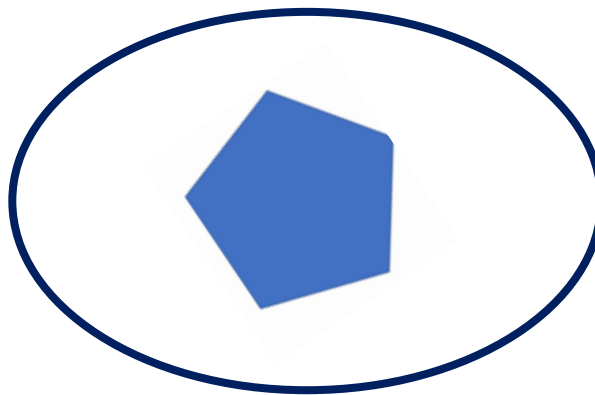
Some 2-D shapes have been sorted into groups.  
However, one of the shapes is in the wrong place.

Which shape is it?

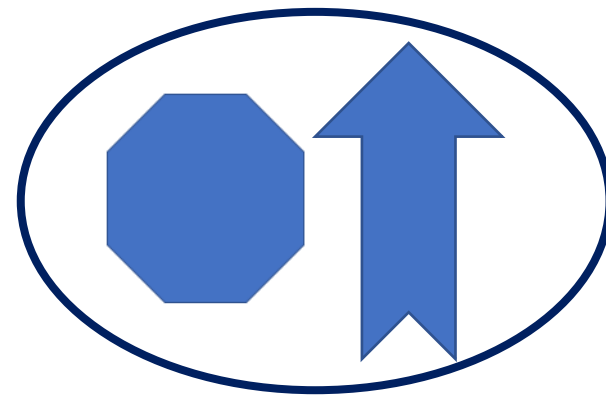
Which group should it have been sorted into?



shapes with  
3 vertices



shapes with  
5 vertices



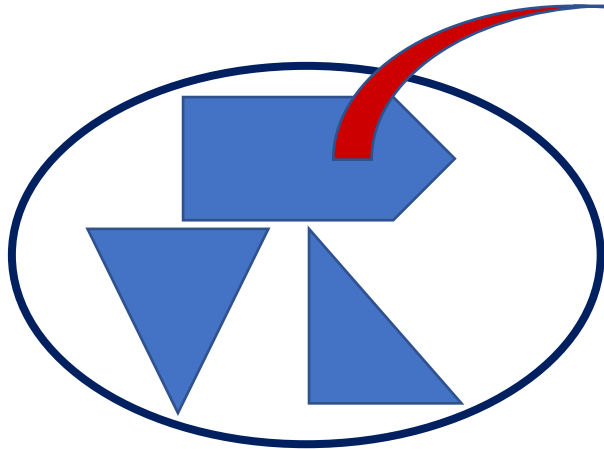
shapes with  
8 vertices

# To sort 2-D shapes

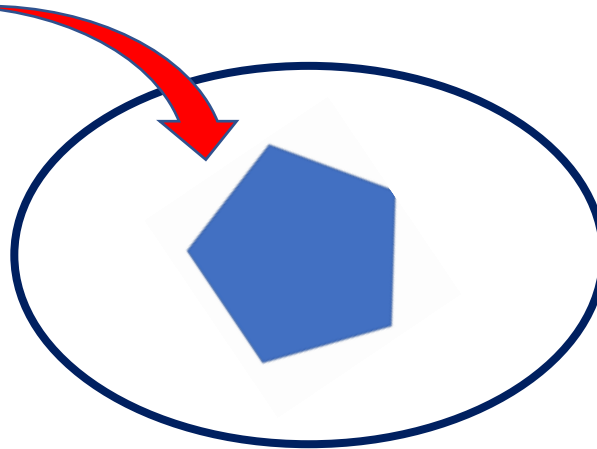
## Talking Time:

Some 2-D shapes have been sorted into groups.  
However, one of the shapes is in the wrong place.  
Which shape is it?  
Which group should it have been sorted into?

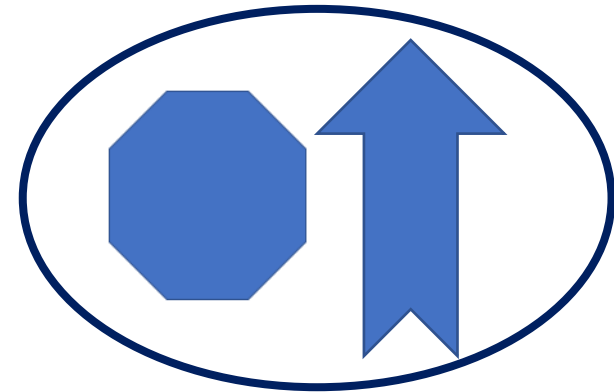
The irregular pentagon is in the wrong place.  
It should be in the shapes with 5 vertices group.



shapes with  
3 vertices



shapes with  
5 vertices



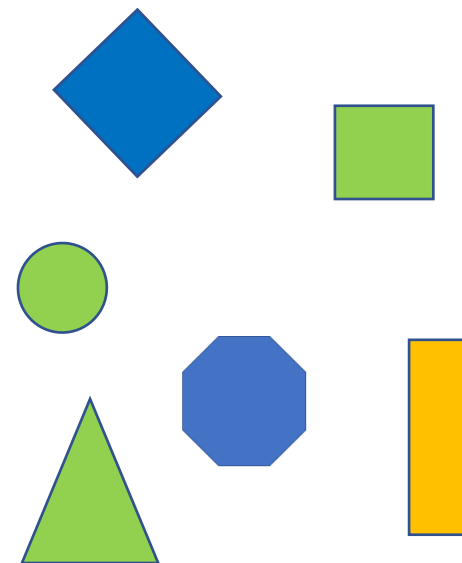
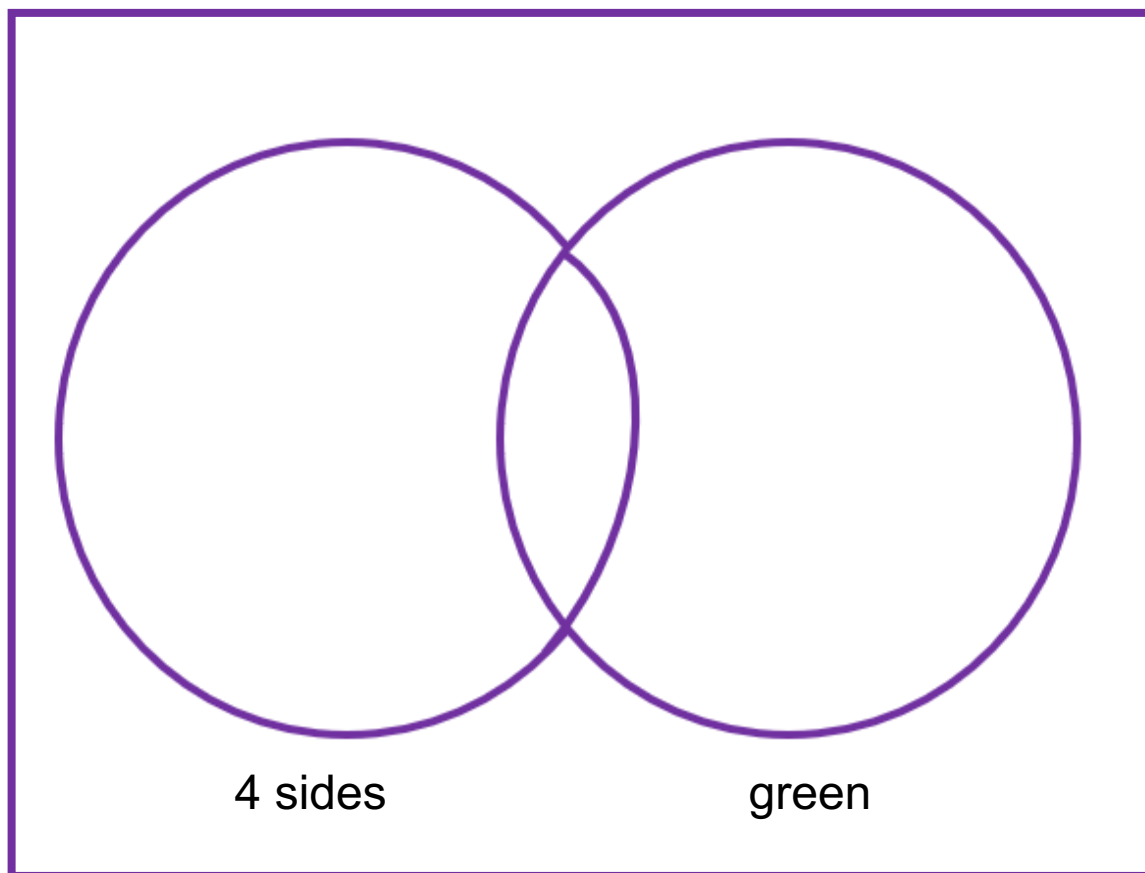
shapes with  
8 vertices

# To sort 2-D shapes

**Activity 1:** Here is a Venn diagram.

Can you put the shapes into the right places?

Where will the octagon go? Why?

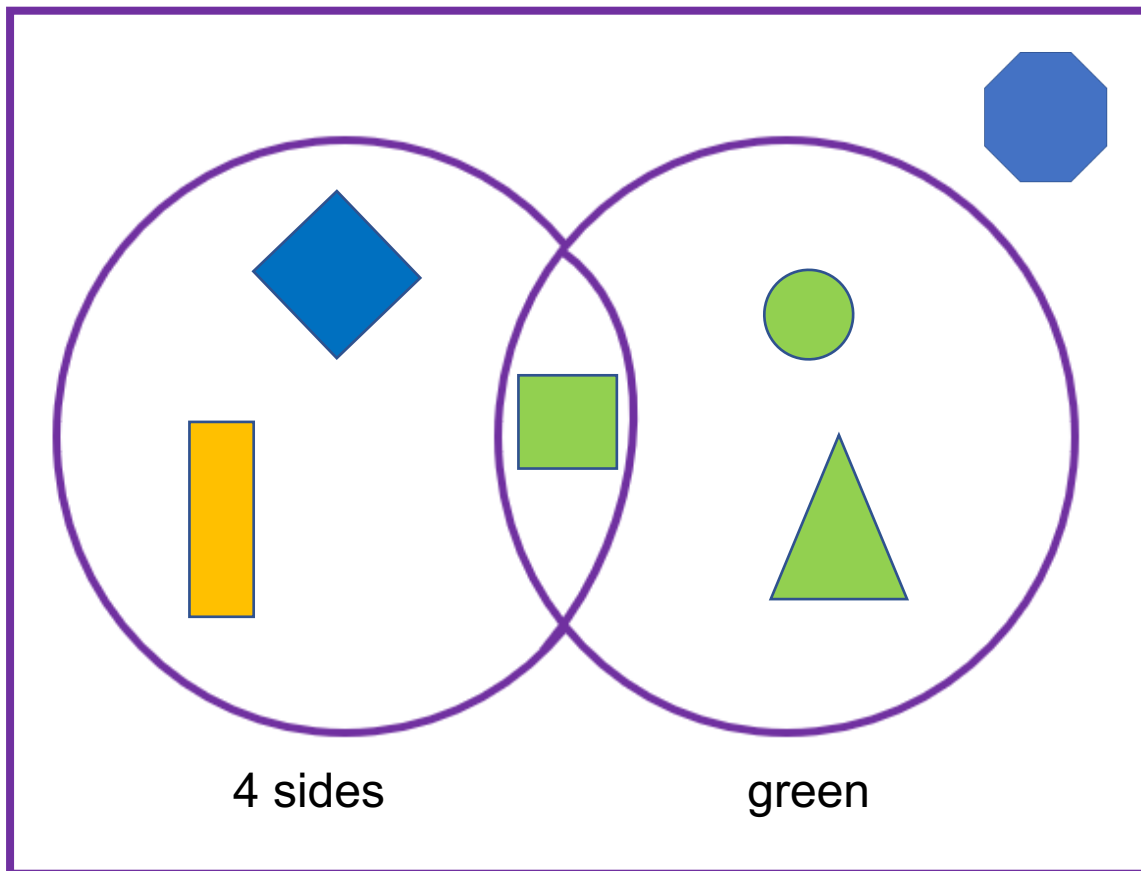


# To sort 2-D shapes

**Activity 1:** Here is a Venn diagram.

Can you put the shapes into the right places?

Where will the octagon go? Why?



The octagon has more than 4 sides and it is not green. That is why it is not in the hoops and stays outside.

**Extension:**

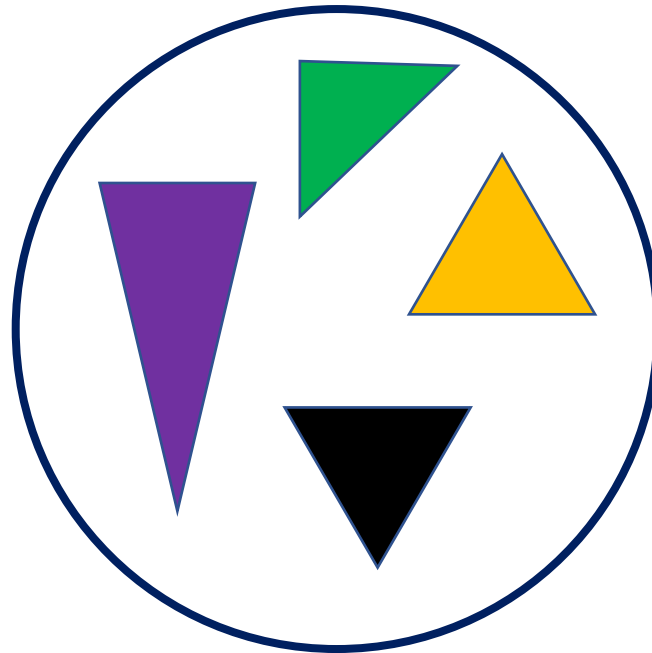
Can you use the same shapes and the same sorting diagram, but think of two different labels?

# To sort 2-D shapes

## Talking Time:

How have these shapes been sorted?

Can you write some labels for the sorting hoops?

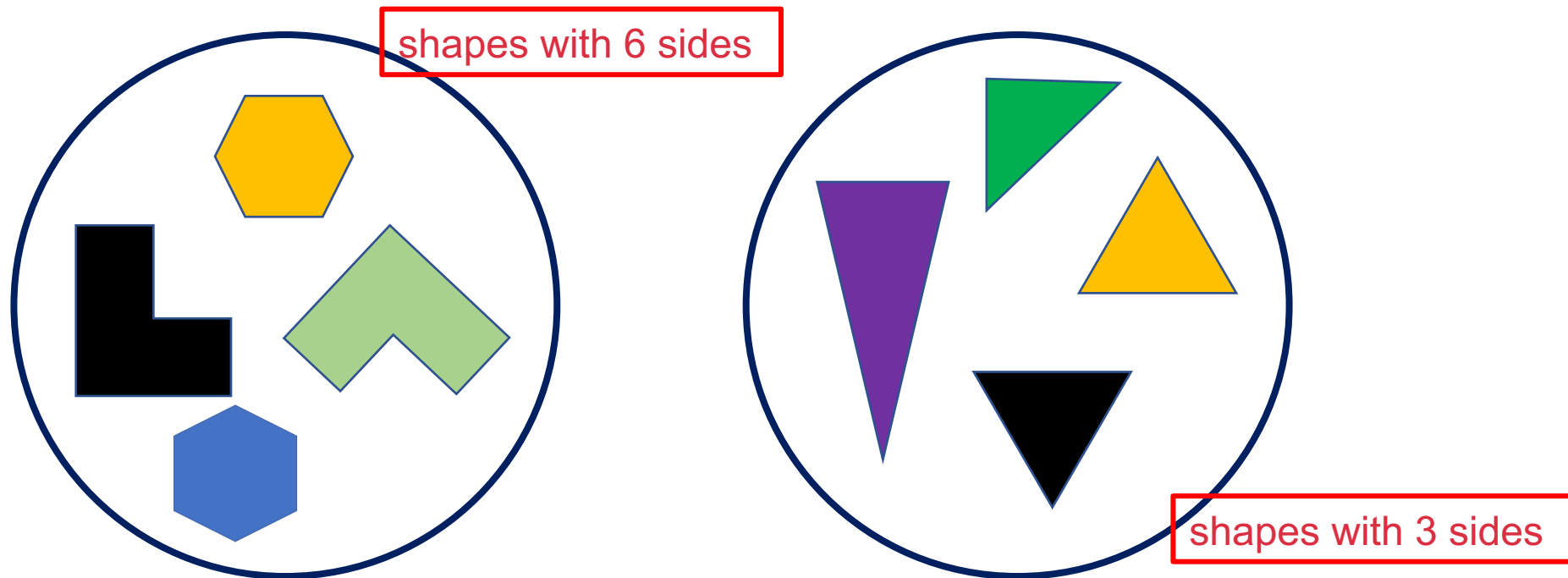


# To sort 2-D shapes

## Talking Time:

How have these shapes been sorted?

Can you write some labels for the sorting hoops?

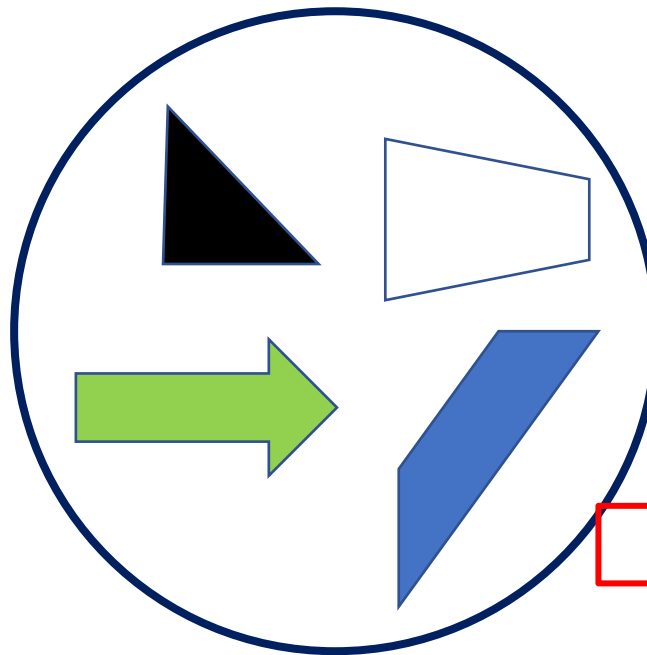
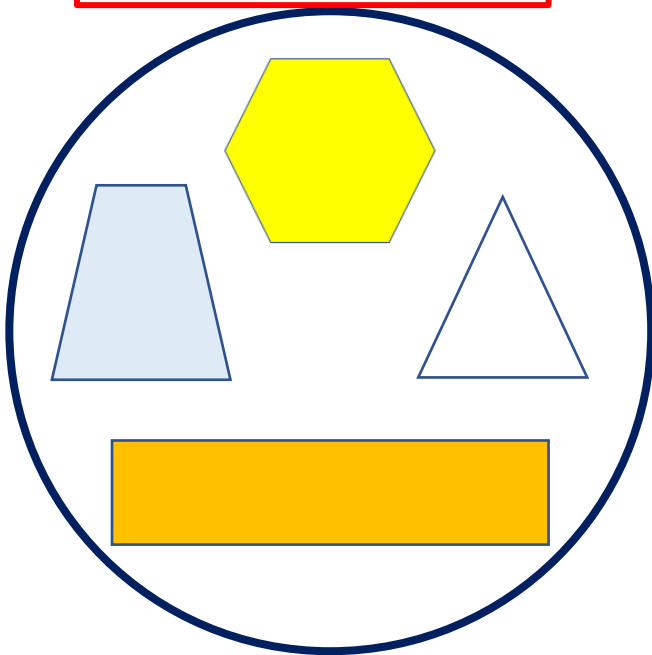


# To sort 2-D shapes

## Talking Time:

How have these shapes been sorted?

Can you write some labels for the sorting hoops?



*Hint: think about the focus from the last lesson.*

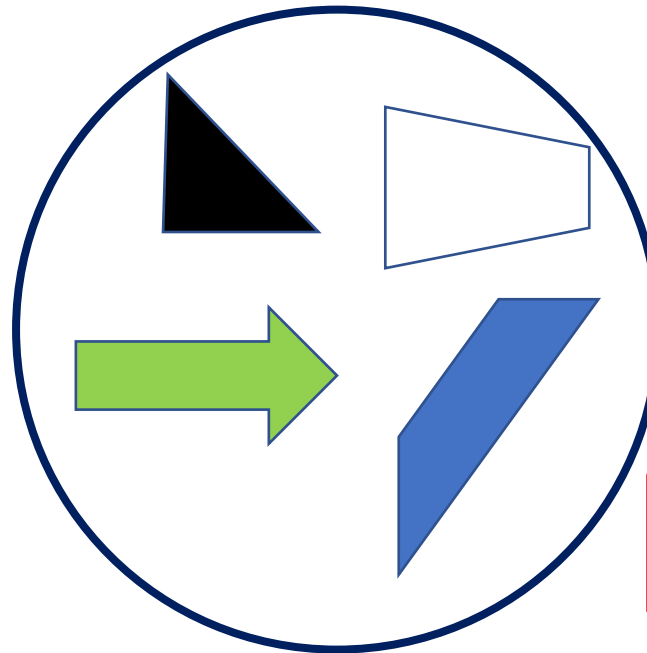
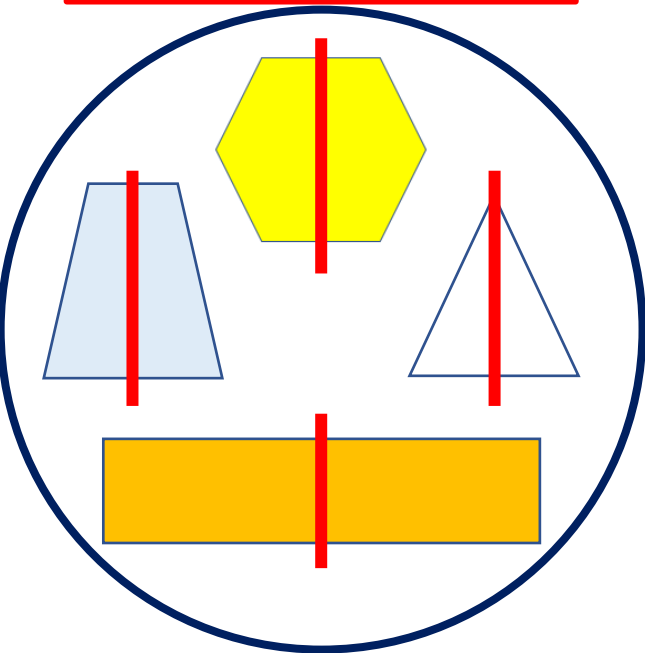
# To sort 2-D shapes

## Talking Time:

How have these shapes been sorted?

Can you write some labels for the sorting hoops?

shapes with a vertical  
line of symmetry



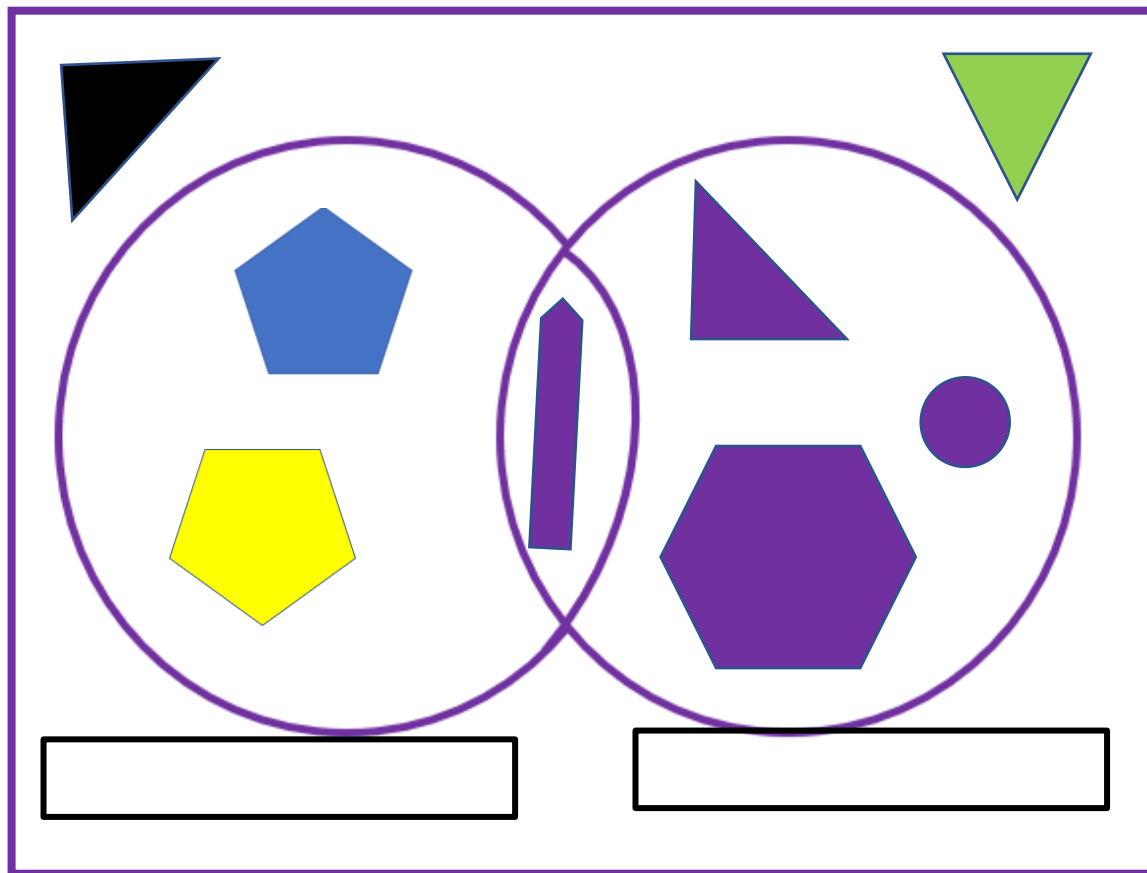
shapes with no vertical  
line of symmetry

*Hint: think about the focus from the last lesson.*



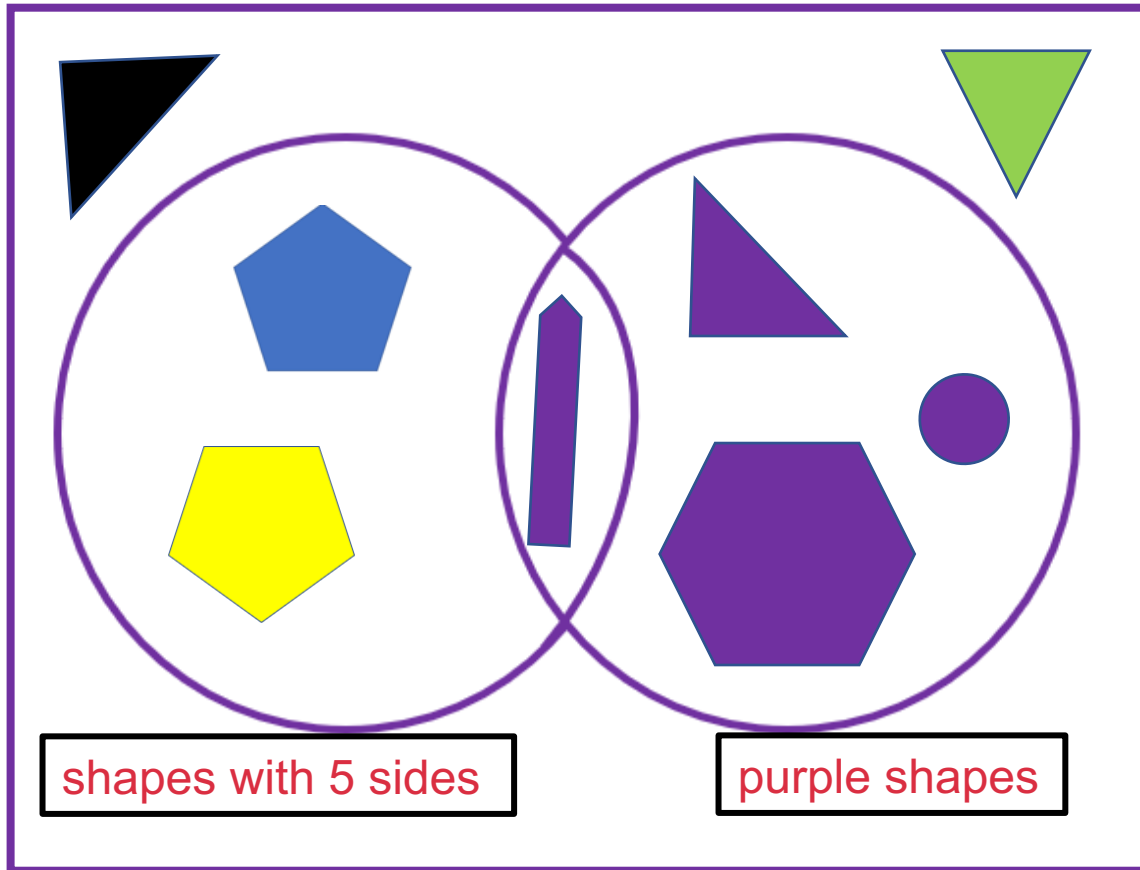
## To sort 2-D shapes

**Talking Time:** Some 2-D shapes have been sorted into this Venn diagram.  
Can you complete the labels?



## To sort 2-D shapes

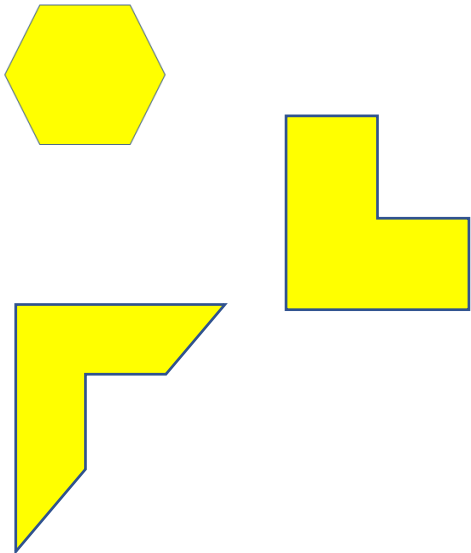
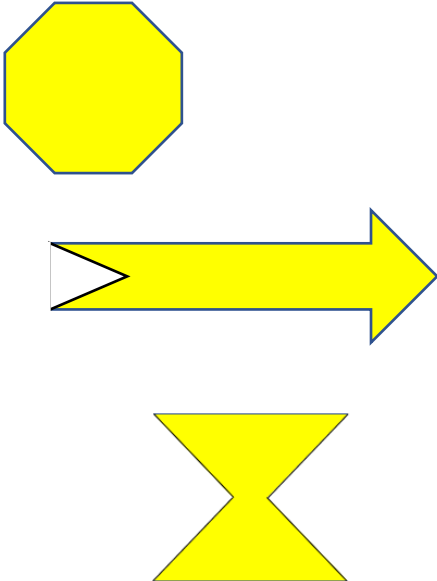
**Talking Time:** Some 2-D shapes have been sorted into this Venn diagram.  
Can you complete the labels?



# To sort 2-D shapes

## Activity 2:

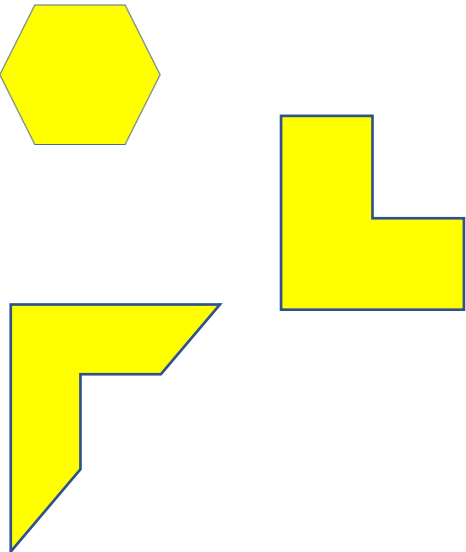
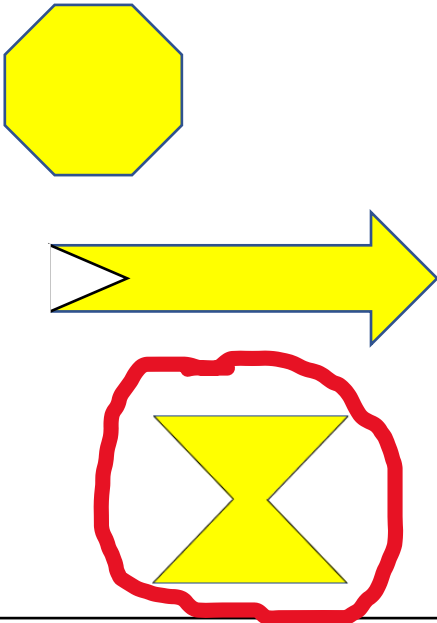
Can you work out which shape is in the wrong place?  
Can you explain or show why it should be in the other part of the sorting diagram?

shapes with 6 vertices	shapes with 8 vertices
	

# To sort 2-D shapes

## Activity 2:

Can you work out which shape is in the wrong place?  
Can you explain or show why it should be in the other part of the sorting diagram?

shapes with 6 vertices	shapes with 8 vertices
	

The irregular hexagon is in the wrong place.  
It is a hexagon and has 6 vertices.

# To sort 2-D shapes

## Talking Time:

Jenson is going to sort some shapes by the number of vertices.

He will sort them into this diagram.

Can you draw **three** shapes that could go into **each** section?



shapes that have 4 vertices	shapes that do not have 4 vertices

# To sort 2-D shapes

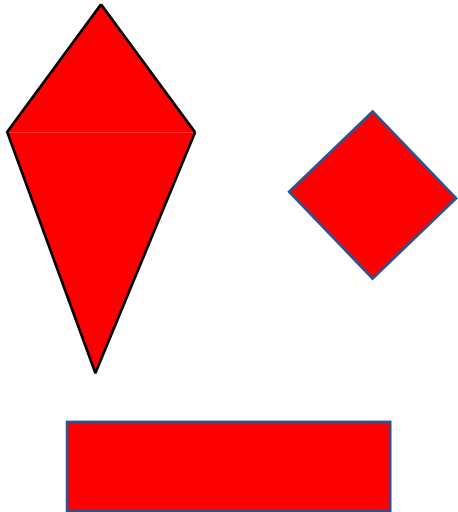
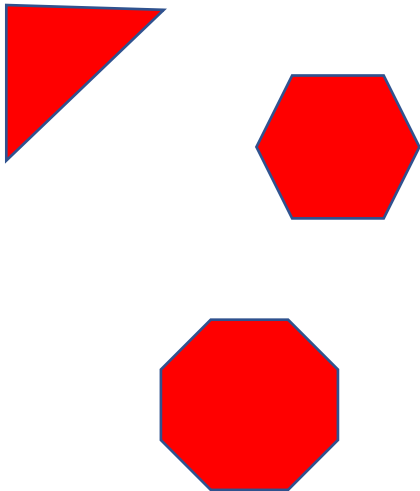
## Talking Time:

Jenson is going to sort some shapes by the number of vertices.

He will sort them into this diagram.

Can you draw **three** shapes that could go into **each** section?



shapes that have 4 vertices	shapes that do not have 4 vertices
	

This is one set of answers.  
You may have drawn other  
shapes for each section.

# To sort 2-D shapes

## Talking Time:

Bella is going to sort some shapes by the **number of sides**. She will sort them into this diagram.

Can you draw **three** shapes that could go into **each** section?



shapes that have <b>fewer than 5 sides</b>	shapes that have <b>more than 5 sides</b>

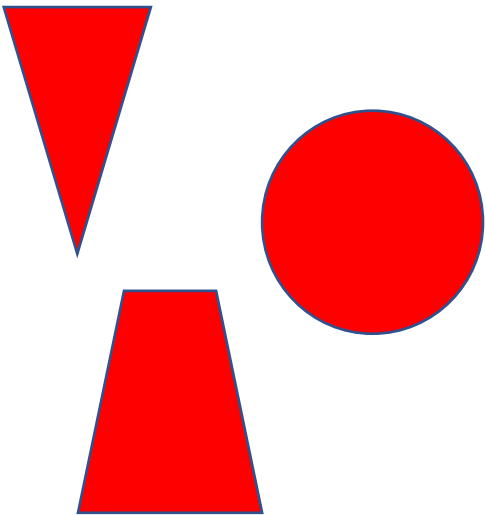
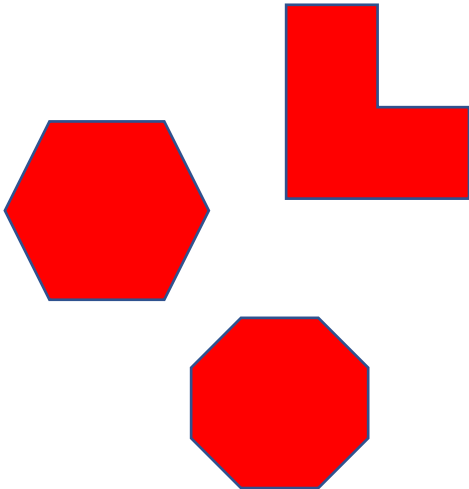
# To sort 2-D shapes

## Talking Time:

Bella is going to sort some shapes by the **number of sides**. She will sort them into this diagram.

Can you draw **three** shapes that could go into **each** section?



shapes that have <b>fewer than 5 sides</b>	shapes that have <b>more than 5 sides</b>
	

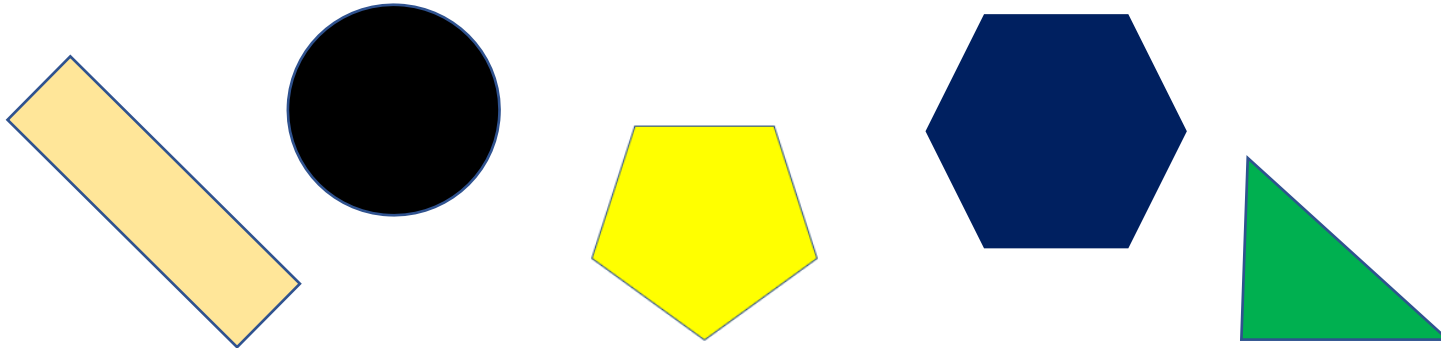


# To sort 2-D shapes

## Activity 3:

Freddie is ordering the 2-D shapes below.

He is putting the shape with the **largest** number of vertices **first** and the shape with the **smallest** number of vertices at the end. Can you help him to order the shapes on the track?



--	--	--	--	--

largest



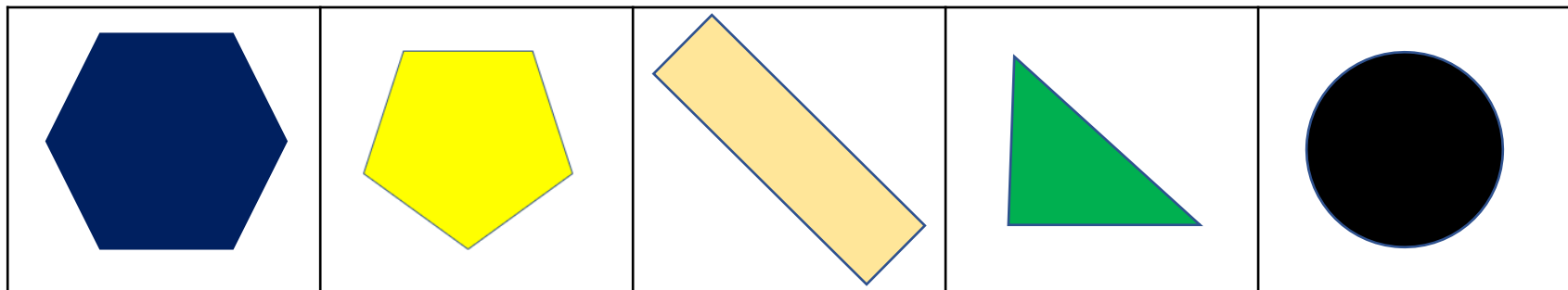
smallest

# To sort 2-D shapes

## Activity 3:

Freddie is ordering the 2-D shapes below.

He is putting the shape with the **largest** number of vertices **first** and the shape with the **smallest** number of vertices at the end. Can you help him to order the shapes on the track?



largest



smallest

# To sort 2-D shapes

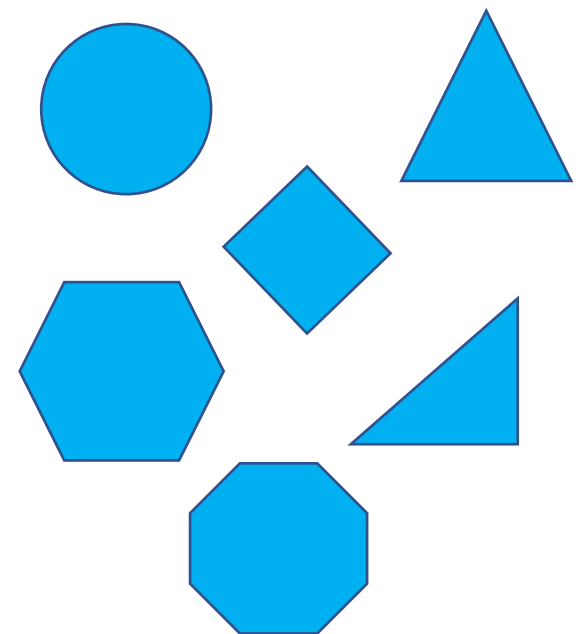
## Evaluation:

Here is a collection of 2-D shapes.

Can you decide how you might sort them all into the sorting diagram?

Can you write your labels?

shapes that	shapes that



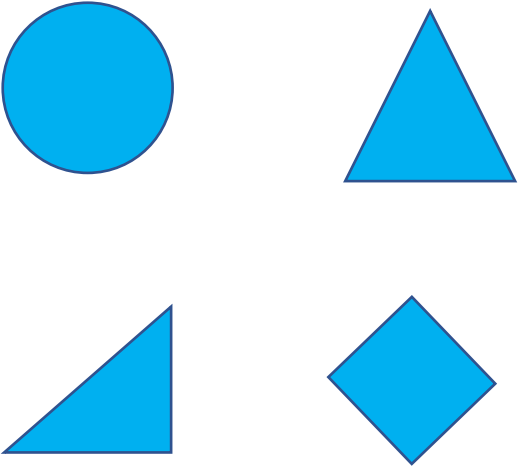
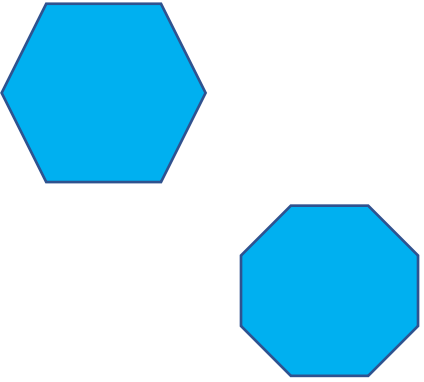
# To sort 2-D shapes

## Evaluation:

Here is a collection of 2-D shapes.

Can you decide how you might sort them all into the sorting diagram?

Can you write your labels?

shapes that <b>have fewer than 5 vertices</b>	shapes that <b>have more than 5 vertices</b>
	

### Success Criteria:

- ☐ I can sort 2D shapes into different groups
- ☐ I can describe how I have sorted shapes using terms like "symmetrical", "side", and "vertex".

This is one set of answers.  
There will be others.




Can you explain your  
answers?

## Do you have a group of pupils who need a boost in maths this term?

Each pupil could receive a personalised lesson every week from our specialist 1-to-1 maths tutors.

- Raise attainment
- Plug any gaps or misconceptions
- Boost confidence

### **Speak to us:**

-  [thirdspacelearning.com](https://thirdspacelearning.com)
-  0203 771 0095
-  [hello@thirdspacelearning.com](mailto:hello@thirdspacelearning.com)