# Sort 2D Shapes

## **Adult Guidance with Question Prompts**



For this activity, children use a selection of the 2D shape cards. (Alternatively, flat plastic shapes can be used. If so, emphasise that these are representations of 2D shapes whereas 2D shapes are drawings of shapes which can't be held.)

## What shapes have you got?

#### Can you name them?

### How could you sort them?

Encourage children to think about the properties of shape they have learnt so far – number of sides, number of vertices and vertical lines of symmetry. Children may also sort by colour or size, as appropriate. They could sort their shapes into two groups using labels like 'squares' and 'not squares' or they could sort into several groups, for example 'triangles', 'squares' and 'circles'.

## How many different ways can you sort the shapes?

#### Can you write labels for your friend's groups?

Some children may be able to use intersecting Venn diagrams and find shapes with two common properties.

Are there any shapes that could go in both groups?

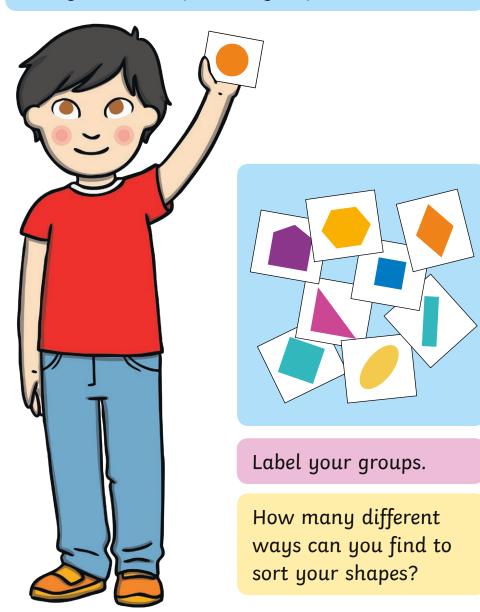


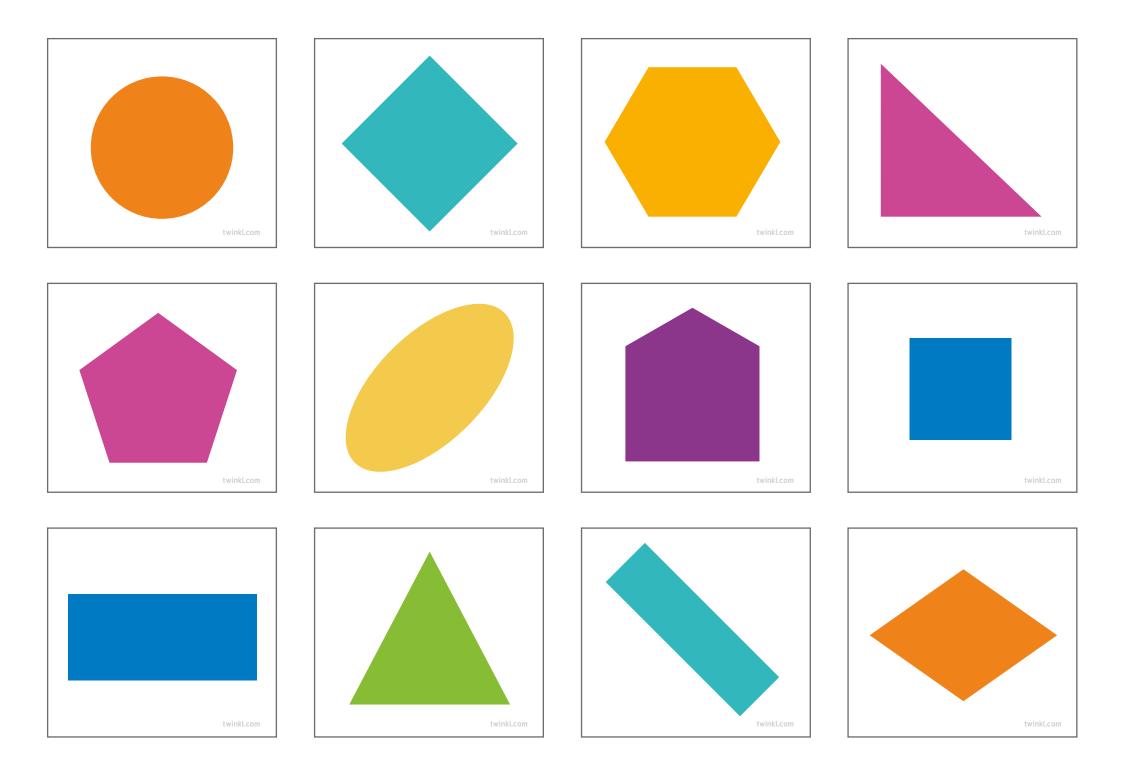


# Sort 2D Shapes



# Sort your 2D shapes into groups.





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This activity uses a Carroll diagram to sort 2D shapes. Children should label the groups using the top row of the diagram, thinking about how the shapes have been sorted.

Describe the shapes in the left-hand box.

What do they have in common?

Describe the shapes in the right-hand box.

What are their properties?

What do they have in common?

What labels could you use to describe these groups?

Can you think of another shape that could belong in each group?

Why have you chosen that one?

Can you draw it?

Can you think of other ways we could sort the same shapes?

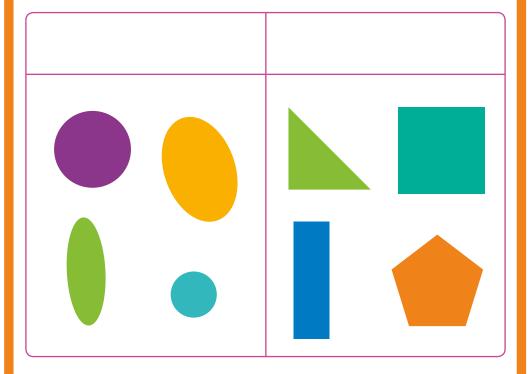
What labels would you give those groups?





How have these shapes been sorted?

Label each group.



What other shapes could go in each part?

How else could you sort these shapes?

Make labels for each group.





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Children use an intersecting Venn diagram to sort 2D shapes, using the properties they have learnt. They think about which shapes will have properties in common. They also need to investigate what other shapes they could add to the diagram. Children may want to use a mirror to help them check for lines of symmetry.

What type of shapes will go in the left circle?

What about the right?

Why are the circles overlapping?

What type of shapes could go in the middle?

Look at the shapes on your sheet. Where will each one go?

Why?

Can the oval go in the middle? Why not?

What other shapes can you think of that could go in each section of this diagram?

Could you draw your own shape that has no vertical line of symmetry?





# Sort 2D Shapes Sort these 2D shapes using the Venn diagram. 1 vertical line 4 vertices of symmetry Add one more shape to each section.