## Count Sides on 2D Shapes

Adult Guidance with Question Prompts
Count Sides on 2D Shapes

Children count the sides on 2D shapes. They could mark each side as they go to make sure they don't count the same side twice. This activity includes some 2D shapes children may not have seen before. They do not need to be able to name these shapes, just count the sides. Children will need a selection of colouring pencils for this activity.

Are these 2D or 3D shapes?
Explain what a side is.
Can you point to one?
Can you point to a shape with four sides?
How many shapes have one side?
Are there any shapes you don't know the name of?
How many sides to do those shapes have?
Can you draw a shape with one/three/four/five sides that's different to these ones?

Colour each of these labels with different colours and then colour the shapes to match.
1 side 3 sides 4 sides 5 sides


## Count Sides on 2D Shapes Title of Card

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This activity addresses common misconceptions with 2D shapes. Children often say a circle has no sides because the side is curved and they are used to seeing straight sides. Children should be aware that there are many different four sided shapes; these can be given the general name 'quadrilaterals'. Children should understand that a square is a type of rectangle because it has four right angles and its opposite sides are of equal length.

Can you draw me a circle or point to one in the room?
Tell me about it.
Does it have any sides?
How many?
What is the side like?
What words describe it?
Could a shape with zero sides exist?
What do you know about rectangles?
How many sides do they have?
What do we know about the opposite sides of a rectangle?
Which of these shapes have opposite sides of equal length?
Is it a rectangle if both pairs of opposite sides are the same as each other?


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This investigation can be done individually, in pairs or small groups. Each child, pair or group will need ten straws of the same length. Children make different shapes by arranging straws in different ways. They can put two or more straws end to end to make longer sides. Photos could be used to record the different shapes children make or they could have a go at drawing the shapes they have made using a ruler to get the sides straight and squared paper.
Can you make a shape with one side?
How about two sides?
Why not?
Can you make different sized triangles? How many?
Show me what four sided shapes you can make?
Can you name any of them?
Can you make shapes with five/six/seven etc. sides?
Show me a shape using all the straws.
Compare your shapes to a friend's, are theirs the same or different?

## Count Sides on 2D Shapes

Using 10 straws, how many different 2D shapes can you make?


## Can you make a circle?

Can you make a 2D shape with two straws?

How many different 4 sided shapes can you make?

Can you make a shape using all the straws?

