

# Count Vertices on 2D Shapes

## Adult Guidance with Question Prompts



Children begin to refer to corners as vertices. They know that a vertex is where two sides meet at a point. Children are able to count the vertices on a 2D shape. They could mark or circle each vertex as they count to make sure they don't count the same one twice.

Can you read these shape names?

What is a vertex?

Can you point to a vertex?

How many vertices do each of these shapes have?

How can you make sure you don't count the same one twice?

What can you tell me about this shape?





Are any of these shapes similar? How?

How are they different?

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Count the vertices and complete the table.

| Shape   | Name      | Number of Vertices |
|---|-----------|--------------------|
|    | square    | _____              |
|    | triangle  | _____              |
|   | pentagon  | _____              |
|  | hexagon   | _____              |
|  | rectangle | _____              |

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Children count the vertices on each shape to find the odd one out in each row. They could mark or circle each vertex as they count to make sure they don't count the same one twice.

How many vertices do each of these shapes have?

I think that the ones in the first row all have four vertices. Am I correct?

Which is the odd one out? Why do you think that?

How many vertices does a circle/oval have?

In the second row, why have you chosen that shape as the odd one out?

What is the name of a shape with six sides?

Does a six-sided shape always have six vertices?

Do all six-sided shapes look the same?

What is the word that we can use to describe all four-sided shapes?

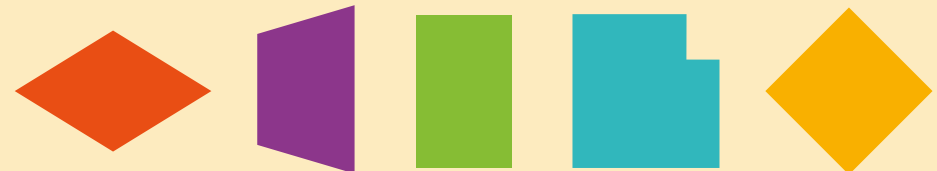
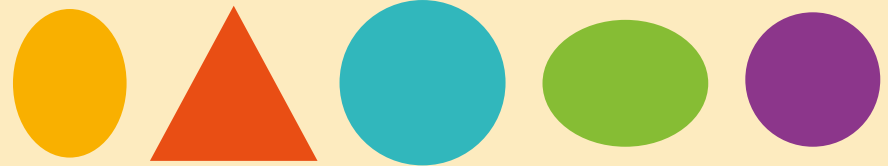
Do all quadrilaterals have four vertices?

Are these all quadrilaterals?

## Count Vertices on 2D Shapes



In each row, count the vertices on each shape and circle the odd one out. Explain your answers.



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Children will need a paper right-angled triangle and a pair of scissors. It is very important that children know that 2D shapes are flat, and that the shapes they will make in the activity are representations of 2D shapes.

What shape is this?

Is your paper shape really a 2D shape? Why not?

How many vertices does your shape have?

When you cut it in half, what two shapes does it make (representations of)?

Can you put the two shapes together in different ways to make other shapes?

Do you think the other shapes you make will also have three vertices each?

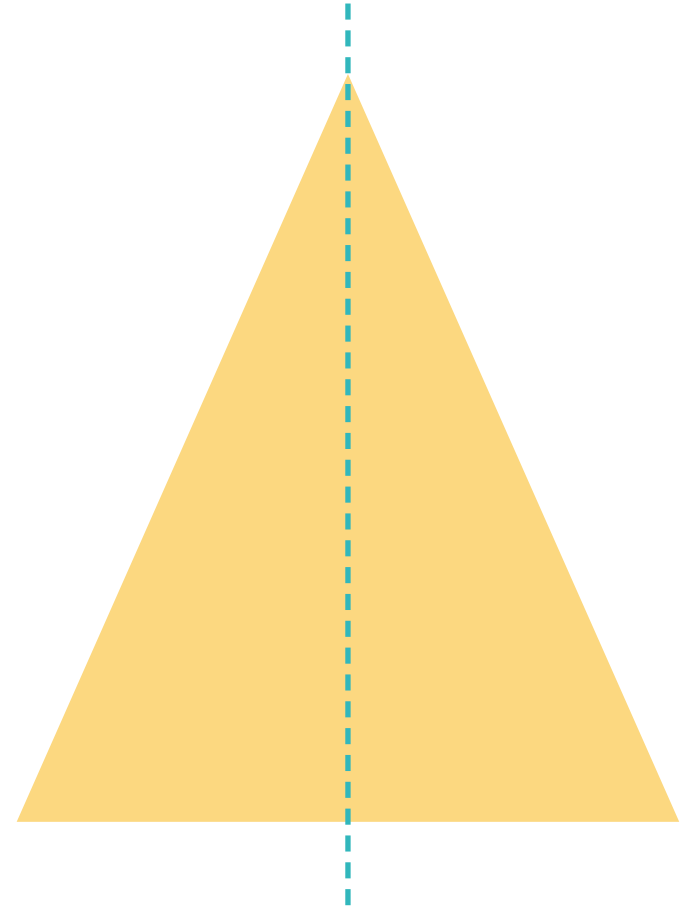
How many vertices do these new shapes have?

Can you name some of the new shapes that you make?

## Count Vertices on 2D Shapes



Cut a paper triangle in half. Put the parts back together to make different shapes.



What different shapes can you make?

How many vertices does each shape have?