Lines of Symmetry

Adult Guidance with Question Prompts

Children learn about vertical lines of symmetry. They use mirrors to identify if a line of symmetry is drawn correctly on a range of shapes – some symmetrical and some non-symmetrical. Using a ruler, children draw lines of symmetry on common 2D shapes.

What does vertical mean?
What is a line of symmetry?
How do you know if this line of symmetry is in the right place?
Can you tell by looking?
How can a mirror help you?
Look at the orange oval. Is it a symmetrical shape or not?
Is the line of symmetry in the right place?
Can you show me where the line of symmetry should be?
Can you use your mirror to check if the shape is symmetrical?
Are these shapes symmetrical?
Prove it.
Can you draw a line of symmetry?
Use your mirror to show me where it will go?
How can you draw your line of symmetry neatly?
Has your friend drawn it in the same place?

Tick the shapes with a correct line of symmetry.

Draw a vertical line of symmetry on each of these shapes.
John has drawn 2 symmetrical shapes on a grid.

Draw the other half of each shape.

Explain how you know what the whole shape looks like.

Children are to recognise what the other half of the shape is going to look like. Children then draw the other half of the shape on the grid using a ruler. The use of a mirror would be helpful for checking if the shape they have drawn is symmetrical.

Describe the part of the shape you can see.
Can you draw the line of symmetry?
Show me how you can use your mirror to see what the other half of the shape should look like.
Can you draw it on the squared paper?
What will you use to make the lines straight?
Can you do the same with the second shape?
What two shapes have you made?
Can you name them?
How many sides and vertices do they have?
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Children sort shapes according to whether they have a vertical line of symmetry and the number of sides. They investigate other shapes that fit the criteria.

What are these shapes?
How many sides do they have?
Do they have lines of symmetry?
Prove it using your mirror.
Which shape will go in each box?
How do you know?
What other shape could go in each box?
Convince me.
Has anyone else in your group chosen a different shape?
Can you both be right?
Why?

Which shape goes in each part?

<table>
<thead>
<tr>
<th>vertical line of symmetry</th>
<th>no vertical line of symmetry</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 sides</td>
<td></td>
</tr>
<tr>
<td>more than 3 sides</td>
<td></td>
</tr>
</tbody>
</table>

Can you think of one more shape to add to each part?