

# Space and 3D Shape

Maths

Year 3

Lesson 5 of 5

Learning Objective		Resources
To be able to make 3D shapes.		Slides Cube, Cuboid, Triangular Prism, Pyramid, Pentagonal Prism and Octahedron Net sheets Dried spaghetti (FSD? activity only) Plasticine (FSD? activity only) Challenge Cards (FSD? activity only) 3D Shapes Opaque bag
Teaching Input		
<ul style="list-style-type: none"> <li>Explain that a 3D net shows a 3D shape that has been unfolded. We can make 3D shapes by folding these nets up.</li> <li>Show children the various nets on the slides. Can you guess what shape this will make when it is folded up? Children to think, pair, share their ideas. Encourage children to describe how they knew what shape it would be from the properties.</li> </ul>		
Main Activity		
<u>Lower ability:</u>	<u>Middle ability:</u>	<u>Higher ability:</u>
Provide children with the Cube Net and Cuboid Net sheets. Support children in cutting out the nets and folding them up to create a 3D shape.	Provide children with the Triangular Prism Net and the Pyramid Net. Challenge children to cut out the nets and fold them up to create a 3D shape.	Provide children with the Pentagonal Prism Net and the Octahedron Net. Challenge children to cut out the nets and fold them up to create a 3D shape.
This could be done as a mixed-ability group challenge. Children could work in groups to make one of each shape and then stick each finished shape to a large sheet of paper. Children can then write a description of each shape next to it to create a 3D shape poster.		
Fancy something different...?		
<ul style="list-style-type: none"> <li>Explain that another way to make 3D shapes is to use dried spaghetti and plasticine. The spaghetti creates the edges and small balls of plasticine join them together at the vertices.</li> <li>Provide children with one of the Challenge Cards, some spaghetti and some plasticine. Children to work through one challenge at a time. Lower ability children should start with simpler shapes such as cubes and cuboids.</li> <li>When finished, children could create a display out the shapes they have created.</li> </ul>		
Plenary	Assessment Questions	
Put a 3D shape in an opaque bag and ask a child to come out and put their hand in the bag and guess the shape. How did you know what shape it was? Repeat this with other children and other shapes.	<ul style="list-style-type: none"> <li>Can children explain what a 3D net is?</li> <li>Can children identify a 3D shape from its net?</li> <li>Can children make 3D shapes?</li> </ul>	