

3D Shape Activities

Over the next few weeks we would be covering 3D shape in school. We have created this document to provide you with suggested activities.

Don't forget we have uploaded the White Rose maths guidance for Spring, which contains a range of activities and teaching notes. This is what we use to guide our planning.

The shapes we would like your child to be familiar with and be able to talk about the properties are as follows:

Cube – 6 faces, 8 vertices (corners), 12 edges

Cuboid – 6 faces, 8 vertices (corners), 12 edges

Sphere – 1 curved face

Pyramid – 5 faces, 5 vertices (corners), 8 edges

Cone - 1 flat face and 1 curved face, 1 corner, 1 edge

Cylinder – 2 flat faces and 1 curved face, 2 edges

Suggested activities:

Any of the activities below can be completed to support 3D shape learning:

Shape Hunt Around the House

Hold up a shape eg. Cube. Your child could then search for different examples of this shape around the house. They could also have a go at using an iPad/phone to take pictures of the shapes they find.

Sorting Game

Provide your child with a range of 3D shapes and ask them to sort them into groups. Why did you put these shapes together? How is this set different to this one? Is there another way we could sort them?

Feely Bag Game

You could provide your child with a bag and a number of 3D shapes inside. They then have to put their hands in and work out what shape they have by feeling for the faces/vertices/sides.

3D Shape Making

You could make 3D shapes using lollipop sticks and playdough or twigs and blue tack or spaghetti and marshmallows. Can you make one and ask your

child which 3D shape you have made. If they say a cube, ask them how they know this to encourage them to talk about the shape properties.

Your child could also make 3D shapes out of playdough.

Lego/Blocks

Encourage your child to explore and see what 3D shapes they can make with Lego. This can be done through ordinary play. If your child is making a town out of Lego, ask them about the shapes they have used/made. Which shapes are best at the bottom/top? Why?

Junk Modelling

Use collected boxes and containers for reclaimed modelling. Using these materials will allow your child to be creative and explore how they can fit 3D shapes together. You could give the children a stimulus such as, 'can you make a vehicle or a town?'

Ask your child, which shapes were easy to fasten together? Which shapes were difficult to fasten together?

Questions:

Which shapes roll?

Does every shape roll?

What do you notice about the shapes that roll and the shapes that don't roll?

Pick a shape – ask your child to tell you all the things they can about that shape. And then change role, you pick a shape and tell your child everything you can about that shape. Can your child find another shape that is similar to the shape you are holding, ask them to explain why it is similar.

Links to More Ideas

<https://www.ncetm.org.uk/self-evaluation/browse/topic/164>

<https://www.youtube.com/watch?v=hGD-omqAOPi> – 3D shapes and properties song

<https://www.theschoolrun.com/what-are-the-names-of-2d-and-3d-shapes> - information document for parents

Twinkl

We will also upload some additional activities from Twinkl onto the school website.