To use the words 'on top of', 'between', 'in front of' and 'behind' to describe position.

Choose a picture. Can you use 3D shapes to match it? Can you describe the position of each shape?



Can you put the shapes in different positions? How would you describe them?



To use the words 'on top of', 'between', 'in front of' and 'behind' to describe position.

Take turns to choose a picture. Tell your partner where to put each 3D shape. Do the positions of their 3D shapes match the picture?



Can you describe new positions for the shapes? Can your friend make a model to match your description?



To use the words 'on top of', 'between', 'in front of' and 'behind' to describe position.

Follow the instructions to position the 3D shapes.





Put a cube **between** a cuboid and a cylinder. Put a cone **on top of** a cube. Put a sphere **behind** a cube.

Can you find another way to describe the position of the cube? Can you use the instructions in any order? Can you describe different positions to place the shapes?



Describing Position 2 Answers



The cylinder is between the cube and the cuboid.

The cone is in front of the cylinder. The cylinder is behind the cone. The sphere is on top of the cuboid.



The cuboid is between the cylinder and the sphere.

The sphere is in front of the cube. The cube is behind the sphere. The cone is on top of the cylinder



d cuboid f cubo

The cube is between the cuboid and the cylinder.

The sphere is in front of the cube. The cube is behind the sphere. The cone is on top of the cuboid. The cube is between the cone and the cylinder.

The cone is in front of the cuboid. The cuboid is behind the cone.

The sphere is on top of the cylinder.



Describing Position 2 Answers



The sphere is between the cuboid and the cube.

The sphere is in front of the cylinder.

The cylinder is behind the sphere. The cone is on top of the cube.



The cone is between the cube and the cuboid.

The cube is in front of the sphere. The sphere is behind the cube.

The cylinder is on top of the cuboid. The cube is on top of the cylinder.



The cube is between the cylinder and the sphere.

The sphere is in front of the cuboid.

The cuboid is behind the sphere. The cone is on top of the cylinder.



The cuboid is between the sphere and the cylinder.

The cone is in front of the cuboid. The cuboid is behind the cone.



Describing Position 2 Answers

Can you find another way to describe the position of the cube?

Put a cube in front of a sphere.

Can you use the instructions in any order?

Yes. The instructions can be used in any order.

Can you describe different positions to place the shapes?

Variables that could be included in possible answers. Shapes shown in brackets are only viable if the shapes have an adhesive quality such as Velcro.

Cone on top of cylinder, cuboid, cube (sphere). Sphere on top of cylinder, cuboid, cube (cone). Cube on top of cylinder, cuboid (cone, sphere). Cuboid on top of cylinder, cube (cone, sphere). Cylinder on top of cuboid, cube (cone, sphere).

Cone between cylinder, cube, cuboid, sphere. Sphere between cylinder, cube, cuboid, cone. Cube between cylinder, cuboid, cone, sphere. Cuboid between cylinder, cube, cone, sphere. Cylinder between cuboid, cube, cone, sphere.

Cone in front of cylinder, cube, cuboid, sphere. Sphere in front of cylinder, cube, cuboid, cone. Cube in front of cylinder, cuboid, cone, sphere. Cuboid in front of cylinder, cube, cone, sphere. Cylinder in front of cuboid, cube, cone, sphere.

Cone behind cylinder, cube, cuboid. Sphere behind cylinder, cube, cuboid, cone. Cube behind cylinder, cuboid, cone, sphere. Cuboid behind cylinder, cube, cone, sphere. Cylinder behind cuboid, cube, cone, sphere.



Describing Position 2 - Diving Adult Guidance with Question Prompts



Children describe the position of 3D shapes using the words 'on top of', 'in front of', 'behind' and 'between'. They find different ways to arrange the 3D shapes and describe their positions. Children will need to move 3D shapes to explore different arrangements.

Can you put your hands on top of/behind/in front of your head?

Can you put your head between your hands?

Look at the 3D shapes. Pick one shape. What can you tell me about its position?

Can you describe it another way?

How would you compare the position of the cylinder with the sphere?

How would you describe it?

How would you describe the position of the cone compared with the cylinder?

Find two ways to describe the position of the sphere.

Use 3D shapes to match the picture.

Which shapes will you need?

Where will you put them?

Can you put the same shapes in different positions?

Describe them to me. Is there another way to describe their position? What can you do to make sure that your ideas are different?



Describing Position 2



Describe the position of each shape.



Put the shapes in different positions.

How would you describe the position of each shape?

Describing Position 2 - Deeper Adult Guidance with Question Prompts



Children describe the position of 3D shapes using the words 'on top of', 'in front of', 'behind' and 'between'. They use their reasoning to explain how many potential positions an extra shape could be placed in. Children will need to move 3D shapes to explore different possibilities.

Can you put your hands on top of your head/in front of you/ behind you?

Can you put your head between your hands?

Find and place 3D shapes to match the picture. Which 3D shape have you been asked to add to the group? Can you put it under a shape? Why? Why not? Which positions can you use? Can you move the other shapes?

What does Zoe think? Do you agree? Can you explain why? What does Ethan think? Do you agree? Can you explain why?

Can you prove it? What can you do to make sure that you have found all of the possibilities?

Encourage children to use positional language during their investigations.



Describing Position 2



Prove it.

Zoe

Describing Position 2 - Deepest Adult Guidance with Question Prompts



Children describe the position of 3D shapes using the words 'on top of', 'in front of', 'behind' and 'between'. They select 3D shapes to place in different arrangements describing their position and evaluate their suitability for the challenge. Children will need to move 3D shapes to explore different possibilities.

Which four 3D shapes would you pick for this challenge?Tell me about your choices.Which shape do you think will work well in all of the positions?Can you explain why?Which shape might be tricky to use? Why?Describe the position of each of your shapes. Can you describe

Can you arrange the shapes to show these positions? Is there another way? Have you found all of the possibilities? Which position is the trickiest? Can you explain why?

Which shapes worked well with this challenge?

Which shapes didn't work well?

Can you show me why with a drawing, photograph or sentence.



them differently?



The cone is **on top** of the cylinder.

The sphere is **between** the cuboid and the cube.

Which shape is behind the sphere? **cylinder**

Which shape is in front of the cylinder? **sphere**

Variables that could be included in possible answers. Shapes shown in brackets are only viable if the shapes have an adhesive quality such as Velcro.

Cone on top of cylinder, cuboid, cube, (sphere). Sphere on top of cylinder, cuboid, cube, (cone). Cube on top of cylinder, cuboid, (cone, sphere). Cuboid on top of cylinder, cube, (cone, sphere). Cylinder on top of cuboid, cube, (cone, sphere).

Cone between cylinder, cube, cuboid, sphere. Sphere between cylinder, cube, cuboid, cone. Cube between cylinder, cuboid, cone, sphere. Cuboid between cylinder, cube, cone, sphere. Cylinder between cuboid, cube, cone, sphere.

Cone in front of cylinder, cube, cuboid, sphere. Sphere in front of cylinder, cube, cuboid, cone. Cube in front of cylinder, cuboid, cone, sphere. Cuboid in front of cylinder, cube, cone, sphere. Cylinder in front of cuboid, cube, cone, sphere.

Cone behind cylinder, cube, cuboid, sphere. Sphere behind cylinder, cube, cuboid, cone. Cube behind cylinder, cuboid, cone, sphere. Cuboid behind cylinder, cube, cone, sphere. Cylinder behind cuboid, cube, cone, sphere.





Ethan is correct.

There are more than four places to put the cone. Here are the ten possibilities:

The cone could go:

on top of the cylinder on top of the cuboid on top of the cube

behind the cylinder behind the cuboid behind the cube

in front of the cylinder in front of the cuboid in front of the cube

between the cuboid and the cube

Children should describe the position of their shapes using the terms 'in front of', 'behind', 'on top of' and 'between'.



Children may say that the sphere, cone and pyramid were tricky to use because it is difficult to position other shapes on top of them. They will find more possibilities to make arrangements of shapes with the cube, cuboid or cylinder, all of which have a flat surface to place a shape on top of.

Children should find that the challenging position was 'on top of' because some shapes do not make good platforms.



Describe the position of each shape.





Without moving the other shapes,

how many different places can you put the cone? cylinder





cube

You can only use these positions.



I think there are more places to put the cone because you can position them by different shapes.



Who is correct?

Prove it.





