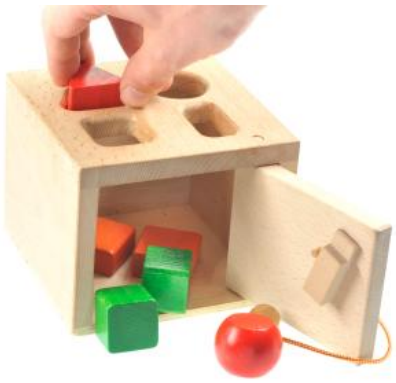
Shape sorter



This activity will give you practice in working with both two-dimensional (2D) and three-dimensional (3D) shapes by designing a shape sorter toy.

Information sheet

A shape sorter is a popular toy with young children. It consists of a set of 3D shapes and a container with holes in the top and/or sides.

Each shape should pass through just one of the holes into the container. To put the shapes into the container, a child has to find the right hole for each shape and hold the shape the right way round.

The container has a door in the side, or a top that can be removed, so that the shapes can be taken out again.

Think about …

- What size and shape of container would be suitable for your shape sorter?
- What different 3D shapes might you include?
- What different 2D shapes might you need for the holes?
- What size of shape could a young child handle?
- How many shapes should you use?
- How will you ensure that only one shape fits through each hole?

To answer

1 You should show the design of your shape sorter by producing:

a Scale drawing of the top and/or sides, showing clearly the position and size of each hole

b Plan and elevation(s) of each shape. These can be sketches giving all the dimensions, or diagrams drawn to scale. Show hidden detail.

c Description of each hole and each shape using correct geometrical terms.

2 When you have completed your design, produce accurate models of each shape and the top and/or sides, to show that your design will work in practice.

3 Using the thinking points as a guide, explain briefly your choice of container design and shapes.

At the end of the activity

Are there any other shapes which would fit through some of your holes?
If so, describe and sketch the shape, and explain why it fits through the hole.