

Identify and name shapes with 4 sides

Notes and guidance

In this small step, children notice squares and rectangles all around them and begin to describe their properties.

They should be introduced to mathematical language for describing the properties of squares and rectangles, such as 'sides', 'straight' and 'corners'.

When introducing the properties of the shapes, children begin to understand that both rectangles and squares have 4 straight sides and 4 corners.

They also begin to understand that squares are a special kind of rectangle, where each of the 4 sides are equal in length.

When using physical representations of 2-D shapes, ensure that they are as thin as possible to support children's understanding that 2-D shapes are completely flat.



Books

- *Bear in a Square* by Stella Blackstone

Key questions

- What do you notice about your shape?
- Which shapes are the same as yours? Which are different?
- How do you know they are the same/different?

Possible sentence stems

- This shape is a _____.
- This shape is the same/different because...
- This shape has _____ sides/corners.

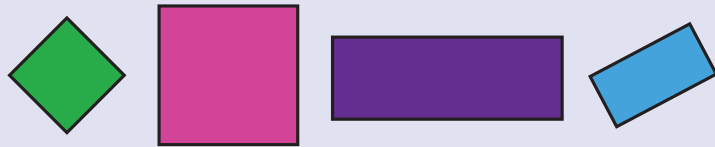
Links to the curriculum

- *Development Matters* – 3 and 4-year-olds – Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
- *Birth to 5 Matters* – Range 6 – Uses informal language and analogies, (e.g. *heart-shaped* and *hand-shaped leaves*), as well as mathematical terms to describe shapes.

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Adult-led learning

Show children a selection of squares and rectangles.



Encourage children to explore the shapes and talk about what they notice.

Ensure that the shapes are shown in different orientations.



Read shape books such as *Bear in a Square* by Stella Blackstone and pay particular attention to the square and rectangle pages.

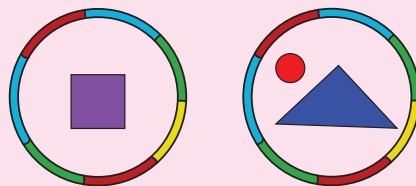
Encourage children to identify the different shapes on each of the pages.

Where can you see a square? Where can you see a rectangle? Prompt children to talk about the properties of each shape.



Hide a range of squares, rectangles, circles and triangles for children to find. Prompt them to find, identify and name the shapes.

Provide two hoops and encourage children to sort the shapes into those that have 4 sides and those that do not have 4 sides.

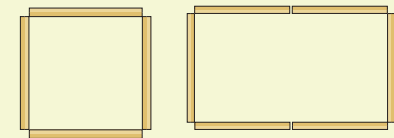


As children are sorting, ask them to explain why they are placing each shape in that group.



Use craft matchsticks to build squares and rectangles.

Ask children to predict how many matchsticks they will need to make each shape.



What is the smallest square they can make? What is the largest?

How many matchsticks did they use?

What is the smallest number of matchsticks needed to build a rectangle?