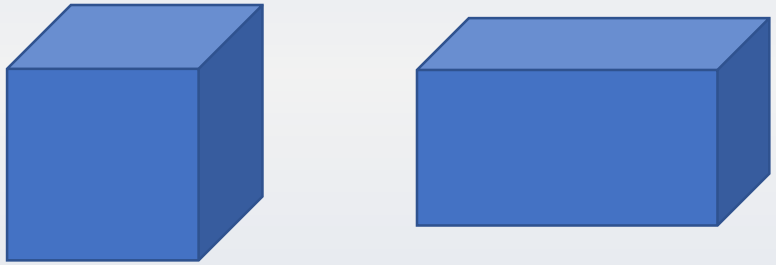
Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

Look at the cube and cuboid. What is the same about these two shapes and what is different?



e.g.

What is different?

The cuboid has some non-square rectangular faces, it is irregular.

The cube has all squares faces, it is regular.

What is the same?

Both have the same number of faces, vertices and edges.

Both have all flat faces.

Both have 3 pairs of parallel faces.

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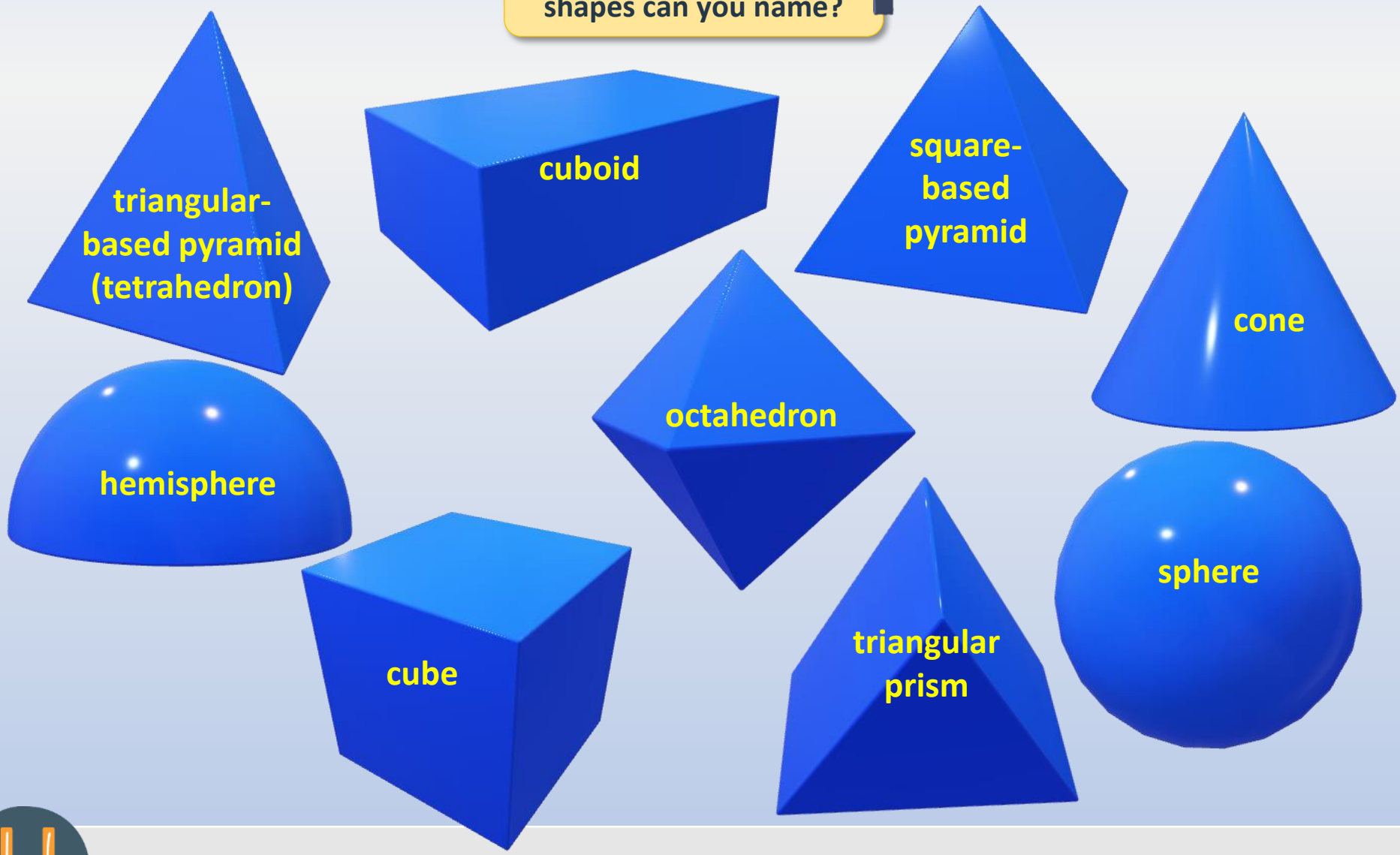
How many of these 3-D shapes can you name?



Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

Carroll diagrams use two headings that are the **opposite** of one another (mutually exclusive), e.g.

'has at least one triangular face' and 'has no triangular faces'

'is a prism' and 'is not a prism'

'is regular' and 'is irregular'

'has at least one pair of parallel faces' and 'has no pairs of parallel faces'.

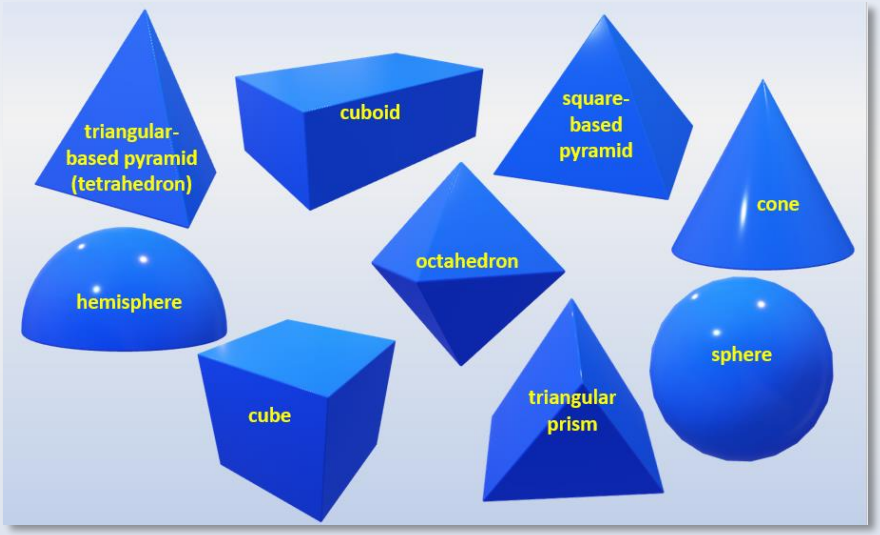
has at least one triangular face	has no triangular faces

Remember that the faces are made from 2-D shapes (two dimensions) and solids are called 3-D shapes (three dimensions).

Let's think about *sorting* the shapes according to different criteria…

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

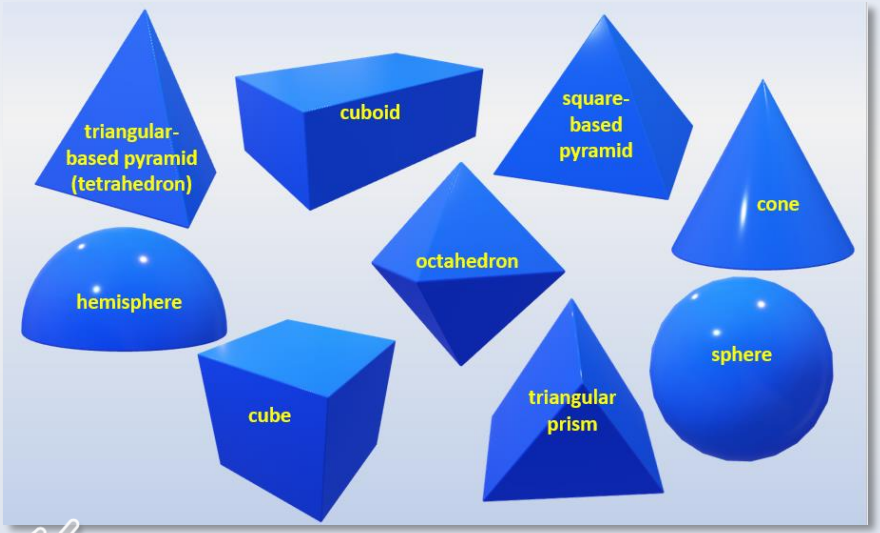
Where would each shape go on this Carroll diagram?



has at least one triangular face	has no triangular faces
tetrahedron square-based pyramid octahedron triangular prism	cube cuboid cone sphere hemisphere

Identify, visualise and describe properties of 3-D shapes; Sort 3-D shapes according to their properties.

Where would each shape go on this Carroll diagram?



has at least one pair of parallel faces	has no pairs of parallel faces
cube cuboid triangular prism	cone sphere hemisphere octahedron tetrahedron square-based pyramid