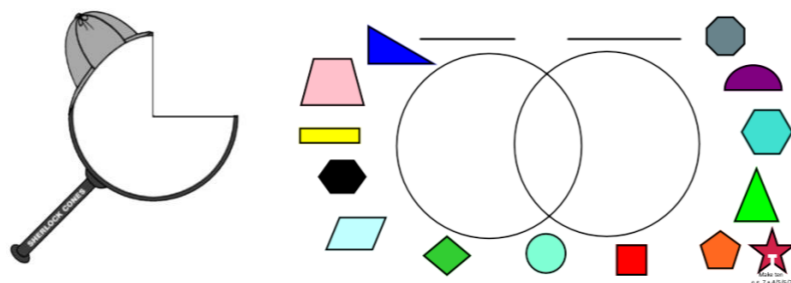
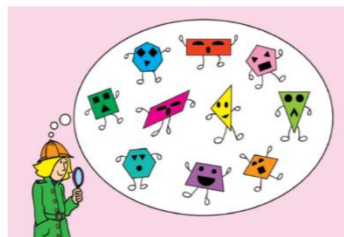


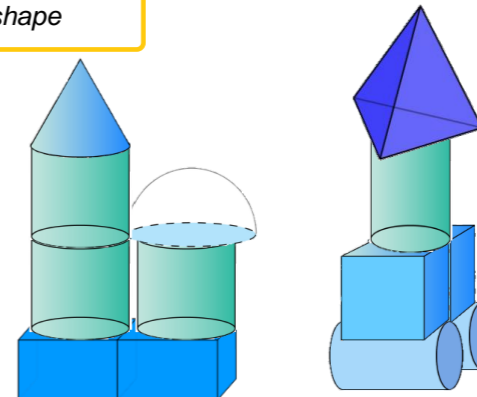
Year 2 Unit 11: Faces, shapes and patterns; lines and turns (3 weeks)

Before you start...

- How familiar are pupils with naming 2-D and 3-D shapes and their properties?
- What experiences have pupils had with using positional language?



Video: The language of shape



Dictionary Corner

This unit contains a large amount of vocabulary to expose your pupils to. Make use of the [vocabulary list](#), this [article](#) and the linked video to ensure all adults have a secure understanding of definitions.

Identifying 2-D shapes and their properties

- L1 Identify shapes by the number of vertices and sides
- L2 Identify right angles in shapes
- L3 Recognise lines of symmetry within 2-D shapes
- L4 Describe and sort 2-D shapes according to their properties

Using the context of "Sherlock Cones – shape detective", pupils identify shapes, including various quadrilaterals, based on clues about their properties. During these lessons, pupils are introduced to the new concepts of right angles and lines of symmetry; plenty of opportunities should be embedded to explore and discuss examples and non-examples of these concepts to support their understanding.

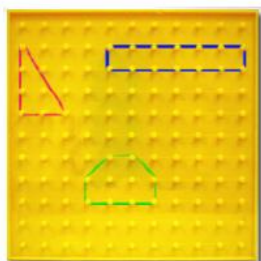
- ? What misconceptions might pupils have when identifying properties of 2-D shapes? How might you plan for these?
- ? How will you develop further opportunities to consolidate this language in Maths Meetings, Do Now activities and other parts of the curriculum?

Identifying 3-D shapes and their properties

- L5 Name and describe 3-D shapes
- L6 Identify 2-D shapes on the surfaces of 3-D shapes

Pupils explore the properties of 3-D shapes that were introduced in Year 1 through building structures and using vocabulary such as vertices, faces, edges and apex. Pupils apply their knowledge of 2-D shapes to describe the faces of 3-D shapes in more detail. For example, 'this is a triangular prism because it has 3 rectangular faces and 2 triangular faces.'

- ? How will you support pupils in distinguishing the vocabulary used for 3-D shapes with vocabulary used for 2-D shapes?
- ? How will you ensure all adults model the precise vocabulary required for 3-D shape consistently?



There is one consolidation lesson in this unit, which should be used according to the needs of pupils.



$\frac{1}{4}$ turn



$\frac{1}{2}$ turn

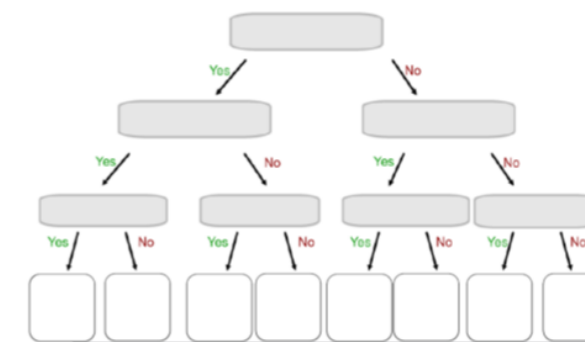


$\frac{3}{4}$ turn

Video: The language of rotation



How might someone get from Morrisums to the market?



Using the language of rotation

- L11 Use the language of rotation
- L12 Make predictions about rotation
- L13 Identify how a pattern has been created through rotation
- L14 Follow a route around a map

Pupils learn about clockwise and anti-clockwise turns by rotating shapes and describing rotations made. Pupils have further opportunities to consolidate and build their conceptual understanding through describing patterns made using rotation before applying their learning from these lessons and previous lessons to follow a route on a map.

- ? How will you draw out connections to previous learning on fractions?
- ? What physical and pictorial models will you use to support conceptual understanding?

Using the language of position, direction and movement

- L9 Describe the position of an object
- L10 Give directions from point A to point B

Using the Big Pictures, pupils describe position and movement. To support pupils' understanding you may wish to adapt the Big Picture to have a map where the buildings 'pop-up' so that pupils can see more clearly what is in front and what is behind. The focus in these lessons is on using correct positional language and pupils should have plenty of opportunities for talk.

- ? How will you ensure that all pupils have plenty of opportunities to become confident with the language used?
- ? How will you make use of cross-curricular opportunities?

Exploring 2-D and 3-D shapes

- L7 Describe and create 2-D shape patterns
- L8 Compare and sort 2-D and 3-D shapes

Pupils apply language to describe and create shape patterns considering shape, size and orientation. In lesson 8, pupils sort both 2-D and 3-D shape using a sorting diagram.

- ? What opportunities are there to make conjectures, compare and make generalisations in these lessons?