## Maths - Year 2

Geometry 5: Investigating and describing rotation

|  | Key Vocabulary | Mathematical Skills <br> - Make the identify different sizes of turns. <br> - Identify right and left, clockwise and anticlockwise. <br> - Turn objects and shapes through given turns in either direction. <br> - Recognise the size and direction of turns made with objects. <br> - Recognise a right angle in the context of turning, or turning objects. <br> - Visualise the result of a given turn without performing it. <br> - Recognise objects which are rotations of each other. <br> - Generalise to predict any given shape in a sequence of rotated shapes. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Turn | Move in a circular direction. |  |  |  |  |
| Rotate | Move in a circular direction. |  |  |  |  |
| Clockwise | The same direction as the hands on a clock turn. |  |  |  |  |
| Anti-clockwise | The opposite direction to the way the hands on a clock turn. |  |  |  |  |
| Quarter turn | A turn a quarter of the way around a circle. |  |  |  |  |
| Half turn | A turn half way around a circle. |  |  |  |  |
| Three-quarter turn | A turn three quarters of the way around a circle. |  |  |  |  |
| Full/whole turn | A turn all the way around a circle. |  |  |  |  |
| Angle | An amount of turn or rotation. |  |  |  |  |
| Right angle | An angle of exactly $90^{\circ}$. |  |  |  |  |
| Positional language | Right way up, upside down, backwards, forwards, right, left, up, down, below, above, beside, next to, opposite. |  |  |  |  |

## Mathematical Methods

- Giving directions and making turns e.g. 'turn right a quarter turn and take 3 steps forward'.

Rotating clock hands.
Rotating Numicon shapes.


A right angle


- Recognising quarter turns and right angles and making designs with rotation.



## Can you..?

- Can you give me directions on how to move the red peg to the yellow peg? You cannot go through the Numicon Shapes and you must keep the pegs on the baseboard.

- Look at the Numicon 4-shape. I want to turn the shape so that the red peg is where the blue peg is now. Can you tell me two different ways to do this?

- Look at these two shapes. What will they will look like if I turn them a quarter-turn anti-clockwise? Can you draw this?


