## Year 5 Geometry Properties of Shapes Learning Journey

| Ready to Progress   |
|---|
| Non-statutory guidance for key skills and knowledge needed                      |
| Resources, ideas and assessment questions available in the Maths Guidance NCETM |

| Year 4 Prior Learning  | Year 5  | NCETM |
|--|---|-------|
| Identify lines of symmetry in 2-D<br>shapes presented in different<br>orientations.  | Identify 3-D shapes, including cubes and other cuboids, from 2-D representations              |       |
| <ul> <li>Classify lines of symmetry of<br/>a 2D shape.</li> </ul>  |   |       |
| <ul> <li>Identify a line of symmetry<br/>of a pattern and for a<br/>diagram of a reflection.</li> </ul>                      |   |       |
|  | Revise reading and plotting co-ordinates in the 1 <sup>st</sup> quadrant                      |       |
| Compare and classify geometric<br>shapes, including quadrilaterals<br>and triangles, based on their<br>properties and sizes. | Use the properties of rectangles to deduce related facts and find missing lengths and angles  |       |
| <ul> <li>Identify and describe an<br/>equilateral triangle.</li> </ul>   | <ul> <li>Use the properties of rectangles to find<br/>missing lengths and angles</li> </ul>   |       |
| <ul> <li>Identify and describe an<br/>isosceles triangle.</li> </ul>   | <ul> <li>Use the properties of rectangles to find<br/>points on a co-ordinate grid</li> </ul> |       |
| <ul> <li>Identify and describe a<br/>scalene triangle.</li> </ul>  |   |       |
| <ul> <li>Identify and describe a<br/>parallelogram.</li> </ul>   |   |       |
| <ul> <li>Identify and describe a<br/>rhombus.</li> </ul>   |   |       |
| <ul> <li>Identify and describe a<br/>trapezium.</li> </ul>   |   |       |
| ✓ Identify and describe a kite.  |   |       |
| <ul> <li>Classify 2D snapes.</li> </ul>  |   |       |
|  | Distinguish between regular and irregular<br>polygons based on reasoning about equal<br>sides |       |
|  | Know the difference between a regular and irregular polygon                                   |       |
|  | Use the properties of regular polygons to find points on a co-ordinate grid                   |       |
| Describe positions on a 2D   | Identify, describe and represent the  |       |
| grid as coordinates in the first   | position of a shape following a reflection or   |       |
| quadrant   | translation, using the appropriate language, and know that the shape has not                  |       |
| V Read the coordinates of a  | ✓ Identify describe and represent the   |       |
| point on a grid in the 1st   | position of a shape following a   |       |

| quadrant.                        | reflection                             |  |
|----------------------------------|--|--|
| ✓ Write the coordinates of a     | ✓ Identify, describe and represent the |  |
| point on a grid in the 1st       | position of a shape following a        |  |
| quadrant.                        | translation                            |  |
| ✓ Plot points using coordinates  |  |  |
| and join up the points to        |  |  |
| create a shape.                  |  |  |
| Describe movements between       |  |  |
| positions as translations of a   |  |  |
| given unit to the left/right and |  |  |
| up/down                          |  |  |
| ✓ Move (translate) a point on a  |  |  |
| grid by a given set of jumps     |  |  |
| either up/down or left/right     |  |  |

Summer term Topics

- > Measurement
- Area and Perimeter
- Reflection and rotation
- 3D shapes
- ≻ Time

When this is complete.... Revision and application of topics to problem solving