**Maths Medium Term Planning**

**Year Six**

|  |  |  |  |
| --- | --- | --- | --- |
| **WR Block: Geometry: Shape** | | **Summer Term** | |
| **National Curriculum Objectives** | **Small Steps** | **Prior Learning** | **Future Progression** |
| * Draw 2-D shapes using given dimensions and angles. * Recognise, describe and build simple 3-D shapes, including making nets. * Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. * Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. * Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | * Measure and classify angles * Calculate angles * Vertically opposite angles * Angles in triangle * Angles in a triangle- special cases * Angles in a triangle- Missing angles * Angles in quadrilaterals * Angles in polygons * Circles * Draw shapes accurately * Nets in 3-D shapes | **Y5:**   * Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. * Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. * Draw given angles, and measure them in degrees (o). * Identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and a turn (total 180o), other multiples of 90o. * Use the properties of rectangles to deduce related facts and find missing lengths and angles. * Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. | **KS3:**   * Use the properties of faces, surfaces, edges and vertices of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres to solve problems in 3-D. |
| **Key Vocabulary**  **New Vocabulary:**  Dodecahedron  circumference, concentric,  Arc  intersecting, intersection  plane | **Key Vocabulary:**  **Previous Year Group:**  Octahedron  net, open, closed  Protractor  maximum/minimum value  outcome  axis of symmetry, reflective symmetry  Congruent  radius, diameter | **Stem Sentences:**  There are \_\_\_ degrees in a full turn so there are \_\_\_\_ degrees in a \_\_\_\_\_ turn.  There are 90 degrees in a right angle.  Angles less than 90 degrees are called acute angles. Angles between 90 degrees and 180 degrees are called obtuse angles.  A full turn is 360 degrees and is made up of 4 right angles.  Vertically opposite angles are \_\_\_.  Angles on a straight line have a sum of 180 degrees.  In a regular polygon all angles are \_\_\_\_\_ and all lines are \_\_\_\_.  The shape has \_\_\_ faces, \_\_\_ edges and \_\_\_ vertices.  In an equilateral triangle, all three angles are \_\_\_°.  In an isosceles triangle, two \_\_\_\_ are equal and two \_\_\_\_ are equal.  In a right-angled triangle, one of the angles is \_\_\_° | |
| **Concrete, Pictorial, Abstract Models/ Calculations** | | | |