|  | Subject: Mathematics |  |  |
| :---: | :---: | :---: | :---: |
| Theme / Area Covered | Shape 3 End Points |  |  |
|  | Age Related Targets - Year 7 | Age Related Targets - Year 8 | Age Related Targets - Year 9 |
| Key Objectives / Learning Pathway Emerging | Use a protractor accurately to measure angles up to $180^{\circ}$ <br> Know that angles in a quadrilateral must $=360^{\circ}$ <br> Know that angles in a triangle must $=180^{\circ}$ <br> Find unknown angles in triangles <br> Find unknown angles in Quadrilaterals | Use a protractor accurately to measure angles up to $360^{\circ}$ <br> Use a protractor accurately to construct angles up to $180^{\circ}$ <br> Find missing angles around a point <br> Find missing angles on a straight line <br> Find unknown angles in isosceles triangles <br> Find missing angles that are vertically opposite | Use a protractor accurately to construct angles up to $360^{\circ}$ <br> Recognise and solve problems involving vertically opposite angles <br> Recognise and solve problems involving angles around a point <br> Recognise and solve problems involving angles on a straight line |
| Key Objectives / Learning Pathway Developing | Use a protractor accurately to measure angles up to $360^{\circ}$ <br> Use a protractor accurately to construct angles up to $180^{\circ}$ <br> Find missing angles around a point <br> Find missing angles on a straight line <br> Find unknown angles in isosceles triangles Find missing angles that are vertically opposite | Use a protractor accurately to construct angles up to $360^{\circ}$ <br> Recognise and solve problems involving vertically opposite angles <br> Recognise and solve problems involving angles around a point <br> Recognise and solve problems involving angles on a straight line | Solve missing angle problems involving alternate or corresponding angles <br> Use knowledge of alternate and corresponding angles to calculate missing angles in geometrical diagrams <br> Establish the size of interior and exterior angles in regular polygons <br> Solve missing angles problems in polygons |
| Key Objectives / Learning Pathway Mastering | Use a protractor accurately to construct angles up to $360^{\circ}$ <br> Recognise and solve problems involving vertically opposite angles <br> Recognise and solve problems involving angles around a point <br> Recognise and solve problems involving angles on a straight line | Solve missing angle problems involving alternate or corresponding angles <br> Use knowledge of alternate and corresponding angles to calculate missing angles in geometrical diagrams <br> Establish the size of interior and exterior angles in regular polygons Solve missing angles problems in polygons | Know the conditions for triangles to be congruent <br> Use the conditions for congruent triangles |
| Key Objectives / Learning Pathway Excelling | Solve missing angle problems involving alternate or corresponding angles | Know the conditions for triangles to be congruent <br> Use the conditions for congruent triangles | Using Pythagoras Theorem to find the length of the hypoteneuse Pythagorean triples |


|  | Use knowledge of alternate and corresponding <br> angles to calculate missing angles in geometrical <br> diagrams |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Establish the size of interior and exterior angles |  |  |  |
| in regular polygons |  |  |  |
| Solve missing angles problems in polygons |  |  |  |.

