| Attainment Band : | Unit 3 - Constructions and loci, Congruence and Similarity, Pythagoras and Angles in polygons |  |
| :---: | :---: | :---: |
|  | Knowledge and Understanding | Skills |
| $\begin{aligned} & \frac{n}{a} \\ & \frac{3}{3} \\ & \frac{0}{\overline{0}} \end{aligned}$ | Understands how to find missing sides of compound shapes 14* <br> Can use mathematical explanations to prove a statement is correct or incorrect 7* | Calculates the shorter side of a right-angled triangle using the hypotenuse and another side and uses this information to solve a perimeter problem <br> 6 <br> Use Pythagoras' theorem to prove whether a triangle is right angled or not 7 <br> Uses the rule for exterior angles in polygons to work out the number of sides when given the interior angle <br> 10 <br> Uses Pythagoras' theorem to find missing sides in compound shapes $14$ |
| 3 <br> O <br> $\overline{0}$ <br> O | Knows how to find the amount of degrees in a polygon 8* <br> Understands the rule for finding exterior angles in regular polygons 9* | Calculates the hypotenuse of a right-angled triangle given the two shorter sides <br> 5b <br> Calculates the exterior angle of a regular octagon <br> Uses a ruler and a pair of compasses to construct a perpendicular through a point <br> 12 <br> Calculates the interior angle of a regular pentagon <br> 13a <br> Uses angle fact on a straight line and in a triangle to solve problems 13b |
| $\stackrel{\text { ¢ }}{\text { ¢ }}$ | Understands how to describe congruency and provide explanations 3b* <br> Understands how to round an answer to three significant figures 5b | Identifies congruent triangles <br> 3a <br> Recognises vertically opposite angles <br> 4a <br> Calculates the area of a triangle <br> 5a <br> Explain why the interior angles of a pentagon sum to 540 degrees <br> 8a <br> Uses congruent triangles to find a missing side <br> 11a <br> Uses congruent triangles to find a missing angle <br> 11b |
| ¢ | Understands the properties of congruent triangles ASA/SAS <br> 4* <br> Understands how to find the perimeter of shapes 6* | Uses a ruler and pair of compasses to construct an angle bisector 1b <br> Uses a ruler and a pair of compasses to construct a perpendicular bisector <br> 2 <br> Uses the properties of congruent triangles to prove why two triangles are congruent <br> 4b <br> Uses the sum of the internal angles in a pentagon to find missing angles 8b |
| $\xrightarrow{ \pm}$ | Can use mathematical equipment effectively 1* | Measures an angle using a protractor 1a <br> Identifies the name of a polygon given the number of sides 9/ 10* |

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[^0]:    * Asterisks mark next to a question number means a question has been broken down into subparts.

