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| Learner stage | What I should know, understand, be able to explain or do |
| Exceptional Mastery (E) | I can apply Pythagoras’ Theorem in 3 dimensions.I can apply Trigonometry in 3 dimensions.I can recall the exact values of Sine, Cosine and Tangent for certain angles.I can use loci to solve problems.I can describe fully a combination of transformations.I can enlarge a shape given a negative scale factor.I can calculate repeated percentage change.I can use an equation that represents a proportional relationship to solve problems involving proportion including with indices and roots. |
| Advancing mastery (A) | I can calculate the interior and exterior angles in a regular polygon.I can use Pythagoras’ Theorem to calculate missing sides of a right-angled triangle.I can use Trigonometry to calculate missing sides and angles of a right-angled triangle.I can calculate the mean, median, mode and range from data given in a frequency table.I can draw a locus.I can describe fully a single transformation.I can enlarge a shape given a fractional scale factor.I can add and subtract mixed numbers.I can multiply and divide mixed numbers.I can use percentage multipliers to increase and decrease by a given percentage.I can write an equation that represents a proportional relationship. |
| Secure mastery (S) | I can identify congruent shapes.I can find missing angles in parallel lines.I can recall Pythagoras’ Theorem.I can calculate the mean, median mode and range from a data set.I can draw plans and elevations of 3d solids.I can construct triangles using a ruler and a pair of compasses.I can bisect an angle.I can perpendicularly bisect a line.I can reflect a shape in a given mirror line.I can enlarge a shape by a given a scale factor.I can add and subtract fractions with different denominators.I can multiply and divide fractions.I can convert between mixed numbers and improper fractions.I can convert between currencies.I can calculate simple percentage increases and decreases.I can use direct and inverse proportion. |
| Developing mastery (D) | I can solve simple equations.I can recognise parallel and perpendicular lines.I can solve angle problems in triangles.I can translate 2D shapes.I can calculate a fraction of an amount.I can calculate simple percentages of amounts.I can identify the difference between direct and inverse proportion. |
| Foundation mastery (F) | I know and can apply the correct order of operations.I can correctly use a tally chart.I can recognise acute, obtuse and reflex angles.I can identify 2D shapes.I can add and subtract fractions with the same denominators. |