|   | Objective   |
|---|---|
| Integers,<br>powers and<br>roots          | Use prime factor form   |
|   | Use index notation for positive integer indices                                     |
|   | Know and use the index laws   |
| Fractions,<br>decimals and<br>percentages | Order decimals  |
|   | Convert between fractions, decimals and percentages                                 |
|   | Calculate fractions of quantities   |
|   | Calculate percentages of quantities   |
| Data                                      | Find the mean, median, mode and range for a set of numbers                          |
|   | Calculate averages from a frequency table   |
|   | Calculate quartiles and IQR from data in lists                                      |
| Calculations and accuracy                 | Calculate with negative numbers   |
|   | Understand and apply the correct order of operations                                |
|   | Add and subtract with decimal numbers   |
|   | Calculate money problems  |
|   | Multiply and divide with decimal numbers  |
|   | Round to a given number of decimal places   |
| g   | Expand simple single brackets   |
| ing a                                     | Factorise single brackets   |
| Simplifying and substituting              | Apply and use the laws of indices using algebraic terms                             |
|   | Subsitute numbers into more complex formulae  |
| Ratio                                     | Write ratios as fractions of the whole and fractions of each part                   |
|   | Divide quantities by simple ratios given the whole, part or difference              |
| Assessmen<br>t Week                       | Revision Lesson   |
|   | Advent Assessment   |
|   | Marking Lesson  |
| Pythagoras<br>and<br>Trigonometr<br>y     | Use Pythagoras' Theorem to calculate missing lengths in right angled triangles      |
|   | Use Pythagoras' Theorem to calculate the height in other shapes                     |
|   | Use Pythgoras' Theorem to calculate the distance between co-ordinates               |
| Forming and solving equations             | Solve two-step linear equations with brackets                                       |
|   | Solve linear equations with unknowns on both sides                                  |
|   | Solve linear equations with unknowns on both sides including brackets               |
| Lines, angles and shapes                  | Know and use the fact that angles on a straight line equal 180°                     |
|   | Know and use the fact that angles in a triangle equal 180°                          |
|   | Know and use the fact that angles around a point equal 360° and vertically opposite |
|   | angles are equal  |
|   | Solve problems using alternate, corresponding and co-interior angles                |
|   | Use angles facts to solve problems involving triangles                              |
| Area                                      | Calculate the area and perimeter of triangles                                       |
|   | Calculate the area and perimeter of parallelograms                                  |
|   | Calculate the area and perimeter of trapezia  |

| Revision Lesson Lent Assessment Marking Lesson Use co-ordinates in all four quadrants Plot straight lines of the form y = 2 and x = 3 Complete a table of values and daw graphs of the form y = mx + c Calculate the gradient of a line Use y = mx + c to calculate the gradient and intercepts of a line Use y = mx + c to calculate the gradient and intercepts of a line Use y = mx + c to calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability oriunersamumat samples term towards theoretical probability Use Inequalities  Inequalities  Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in tines such as x = 2 and y = -3 Reflect objects in the lines y = x and y = -x Rotate shapes about any point Translate a shape by a vector |                                    | Calculate the area and perimeter of compound shapes   |
|--|------------------------------------|---|
| Use co-ordinates in all four quadrants Plot straight lines of the form y = 2 and x = 3 Complete a table of values and daw graphs of the form y = mx + c Calculate the gradient of a line Use y = mx + c to calculate the gradient and intercepts of a line Calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability onder same that samples term towards theoretical probability with increasing distribution Evaluate Inequalities Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph   | Assessmen<br>t Week                | Revision Lesson   |
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| Calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids  Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability onderstand that samples tend towards theoretical probability with increasing distribution  Linequalities  Use Inequalities Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  | Sequences, functions<br>and graphs | Use co-ordinates in all four quadrants  |
| Calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids  Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability onderstand that samples tend towards theoretical probability with increasing distribution  Linequalities  Use Inequalities Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Plot straight lines of the form $y = 2$ and $x = 3$   |
| Calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids  Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability onderstand that samples tend towards theoretical probability with increasing distribution  Linequalities  Use Inequalities Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Complete a table of values and daw graphs of the form y = mx + c                                |
| Calculate the volume of cubes and cuboids When given the volume, calculate lengths of cuboids  Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability onderstand that samples tend towards theoretical probability with increasing distribution  Linequalities  Use Inequalities Convert from one metric unit to another Solve simple speed problems proportionally Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Calculate the gradient of a line  |
| When given the volume, calculate lengths of cuboids  Express a probability as a fraction  Use the fact that mutually exclusive probabilities add up to 1  Use a sample space diagram to find a probability of two mutually exclusive events occuring  Understand and use relative frequency as an estimate of probability or   |                                    | Use y = mx + c to calculate the gradient and intercepts of a line                               |
| Express a probability as a fraction Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability Understand that samples tend towards theoretical probability with increasing distribution  Linequalities Use Inequalities  Convert from one metric unit to another Solve simple speed problems proportionally  Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  | e<br>IoV                           | Calculate the volume of cubes and cuboids   |
| Use the fact that mutually exclusive probabilities add up to 1 Use a sample space diagram to find a probability of two mutually exclusive events occuring Understand and use relative frequency as an estimate of probability of understand that samples tend towards theoretical probability with increasing distribution Evaluate Inequalities  Use Inequalities  Convert from one metric unit to another Solve simple speed problems proportionally  Revision Lesson Lent Assessment Marking Lesson  Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | When given the volume, calculate lengths of cuboids   |
| Use a sample space diagram to find a probability of two mutually exclusive events occuring  Understand and use relative frequency as an estimate of probability Understand unat samples tend towards theoretical probability with increasing distribution Evaluate Inequalities  Use Inequalities  Convert from one metric unit to another  Solve simple speed problems proportionally  Revision Lesson  Lent Assessment  Marking Lesson  Identify line symmetry and rotational symmetry in a 2D shapes  Reflect shapes in the axes of a graph   |                                    | Express a probability as a fraction   |
| Understand and use relative frequency as an estimate of probability Ondersand that samples tend towards theoretical probability with increasing distribution    Use Inequalities   |                                    | Use the fact that mutually exclusive probabilities add up to 1                                  |
| Understand and use relative frequency as an estimate of probability Ondersand that samples tend towards theoretical probability with increasing distribution    Use Inequalities   | billity                            | Use a sample space diagram to find a probabilty of two mutually exclusive events                |
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| Use Inequalities Use Inequalities  Convert from one metric unit to another Solve simple speed problems proportionally  Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Understand and use relative frequency as an estimate of probability                             |
| Evaluate Inequalities  Convert from one metric unit to another Solve simple speed problems proportionally  Revision Lesson Lent Assessment Marking Lesson  Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph   |                                    | ondertsand that samples tend towards theoretical probability with increasing distribution       |
| Evaluate Inequalities  Convert from one metric unit to another  Solve simple speed problems proportionally  Revision Lesson  Lent Assessment  Marking Lesson  Identify line symmetry and rotational symmetry in a 2D shapes  Reflect shapes in the axes of a graph   | Inoqualities                       | Use Inequality Notation   |
| Solve simple speed problems proportionally  Revision Lesson Lent Assessment Marking Lesson  Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  | inequalities                       | Evaluate Inequalities   |
| Revision Lesson Lent Assessment Marking Lesson Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph   | Measur                             | Convert from one metric unit to another   |
| Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Solve simple speed problems proportionally  |
| Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  | Assessmen<br>t Week                | Revision Lesson   |
| Identify line symmetry and rotational symmetry in a 2D shapes Reflect shapes in the axes of a graph  |                                    | Lent Assessment   |
| Reflect shapes in the axes of a graph  |                                    | Marking Lesson  |
|  | Transformations                    | Identify line symmetry and rotational symmetry in a 2D shapes                                   |
| Reflect shapes in lines such as x = 2 and y = -3 Reflect objects in the lines y = x and y = -x Rotate shapes about any point Translate a shape by a vector   |                                    | Reflect shapes in the axes of a graph   |
| Reflect objects in the lines y = x and y = -x  Rotate shapes about any point  Translate a shape by a vector  |                                    | Reflect shapes in lines such as x = 2 and y = -3  |
| Rotate shapes about any point  Translate a shape by a vector   |                                    | Reflect objects in the lines y = x and y = -x   |
| Translate a shape by a vector  |                                    |   |
|  |                                    |   |
|  |                                    | Add and subtract vectors and multiply vectors by a scalar, in both diagrammatic and column form |
| Enlarge a shape by a positive scale factor (including fractions) from a centre   |                                    | Enlarge a shape by a positive scale factor (including fractions) from a centre                  |