| YEAR 11 | Edexcel GCSE (9-1) Mathematics Foundation | | |
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| TERM | UNIT / LESSON | PRIOR KNOWLEDGE | LEARNING INTENTIONS |
| Key: Italic specification references are assumed prior knowledge and are covered in the prior knowledge check rather than the main teaching. | | | |
| Wk 8<br>30/10/2023<br>Wk9<br>06/11/2023 | Mock Exams | | |
| Wk 10 | 8.3 Area of compound shapes | Know that 1 km = 1000 m | Calculate the perimeter and area of shapes made from triangles and rectangles. |
| 13/11/2023 | | Multiply and divide by powers of 10. | Calculate areas in hectares, and convert between ha and m2. |
| | | Convert between metric measures of area. | |
| | 8.4 Surface area of 3D solids | Describe shapes using correct vocabulary, including face, edge and vertex. | Calculate the surface area of a cuboid. |
| | | Sketch the net of a cuboid. | Calculate the surface area of a prism. |
| | | Work out the area of rectangles, triangles and trapezia. | |
| Wk 11 | 8.5 Volume of prisms | Identify cross sections of prisms. | Calculate the volume of a cuboid. |
| 20/11/2023 | | Decide whether a 3D solid is a prism. | Calculate the volume of a prism. |
| | 8.6 More volume and surface area | Multiply and divide by large powers of 10. | Solve problems involving surface area and volume. |
| | | Know that 1 litre = 1000 ml. | Convert between measures of volume. |
| | | Work out the volume and surface area of a prism. | |
| Wk 12 | 19.1 Direct proportion | Recognise direct proportion | Write and use equations to solve problems involving direct proportion. |
| 27/11/2023 | | Write equations for quantities in direct proportion. | |
| | 19.2 More direct proportion | Use direct proportion. | Write and use equations to solve problems involving direct proportion. |
| | | Find the constant of proportionality. | Solve problems involving square and cubic proportionality. |
| | 19.3 Inverse proportion | Using inverse proportion to solve simple problems. | Write and use equations to solve problems involving inverse proportion. |
| | | Write equations for quantities in direct proportion. | Use and recognise graphs showing inverse proportion. |
| Wk 13 | 3.7 Scatter graphs | Understand depreciation of value as things age, as well as an understanding of exceptions (e.g. classic cars) | Plot and interpret scatter graphs. |
| 04/12/2023 | | Plot coordinates in the first quadrant. | Determine whether or not there is a relationship between sets of data. |
| | 3.8 Line of best fit | Recall definitions of positive, negative and no correlation. | Draw a line of best fit on a scatter graph. |
| | | Read values from a graph. | Use the line of best fit to predict values. |
| Wk 14 | 16.1 Expanding double brackets | Be able to work out area of a shape using algebraic terms. | Multiply double brackets. |
| 11/12/2023 | | Simplify algebraic expressions. | Recognise quadratic expressions. |
| | | Multiply a single term over brackets. | Square single brackets. |
| | 16.2 Plotting quadratic graphs | Be able to square terms. | Plot graphs of quadratic functions. |
| | | Identify the equation of the mirror line. | Recognise a quadratic function. |
| | | Copy and complete a table of values and plot a straight line graph. | Use quadratic graphs to solve problems. |
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