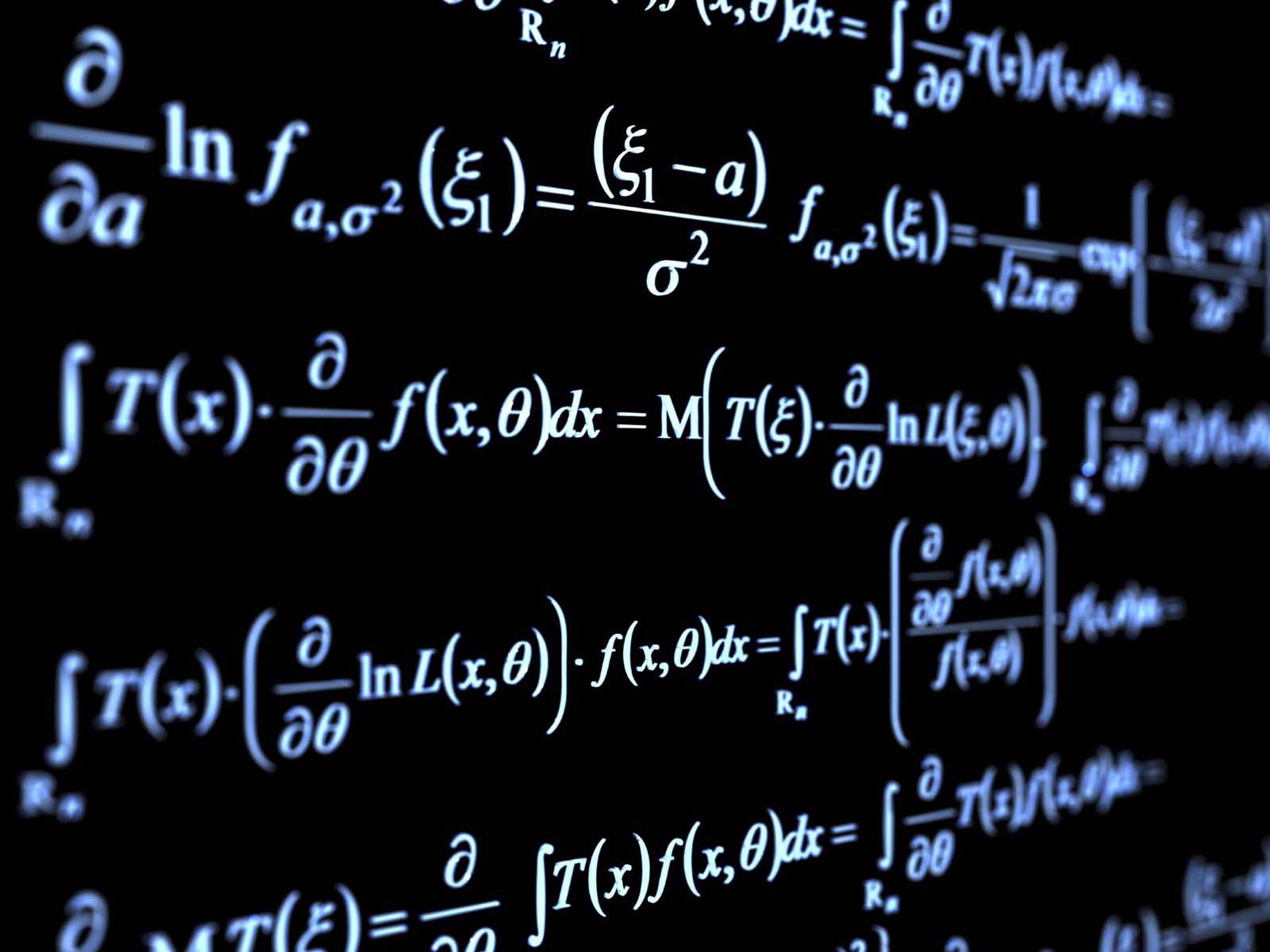
**Year 10** 

**GCSE GROUP SCHEME OF WORK**

**This scheme of work is to be used as a guide only. Sometimes due to unforeseen circumstances the class may be a week behind or sometimes may even a week ahead of schedule. The topics will still be covered in the same order.**

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| **Term 1** | |
| **Week 1**  **Number: Basic number.** | * **Integers and place Value.** * **Using Decimals up to 2 places, to include addition and subtraction.** * **Rounding to decimal places and sig figs.** * **Estimating answers.** |
| **Week 2**  **Number: Basic number.** | * **Multiplication up to 3 figure numbers by 3 figure numbers.** * **Division.** * **Multiplication times 10 including decimals.** * **Division by 10 including decimals.** |
| **Week 3**  **Negative numbers.** | * **Introduce negative numbers and give real life examples.** * **Use the four operations using negative numbers.** |
| **Week 4**  **Indices.** | * **Introduce square numbers and square roots.** * **Multiplication and division laws of indices including brackets.** |
| **Week 5**  **BIDMAS.** | * **Work out difficult calculations using BIDMAS. To include decimal places, rounding and sig figs.** |
| **Week 6**  **Review week.** | * **Review all topics covered this term. These topics are essential to the future progress of students.** |
| **Week 7**  **Test.** | * **End of term test.** * **End of term activities.** |

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| **Term 2** | |
| **Week 1**  **Percentages.** | * **Understanding percentages.** * **Writing one number as a percentage of another.** * **Percentages of an amount without a calculator. 25% 50% etc.** * **Percentages of an amount with a calculator** |
| **Week 2**  **Fractions.** | * **Introduction of simple fractions including non-unitary numerators.** * **Equivalent fractions.** * **Addition and subtraction of fractions.** * **Multiplication and division of fractions.** |
| **Week 3**  **Percentage, fractions and decimals.** | * **Know why and when we use each of the three proportions.** * **Be able to change from percentage to decimal or fraction and vice versa.** |
| **Week 4**  **Ratio and proportion.** | * **Using ratios.** * **Dividing into a given ratio.** * **Best buys.** * **Proportional ingredients.** |
| **Week 5**  **Multiples, factors and prime numbers.** | * **Find multiple of any number.** * **Find all the factors of any number.** * **Identify prime numbers.** |
| **Week 6**  **Review week** | * **Review all topics covered this term. Once again these topics are fundamental for the GCSE exams.** |
| **Week 7**  **Test** | * **End of term test to include material from term 1.** * **Christmas maths activities.** |

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| **Term 3** | |
| **Week 1**  **Algebra.** | * **Simplifying expressions.** * **Multiplying and dividing Letters.** * **Expanding brackets.** * **Factorising.** |
| **Week 2**  **Equations.** | * **Solving basic equations.** * **Solving two step equations.** * **Solving equations involving brackets.** |
| **Week 3**  **Equations.** | * **Make an algebraic equation.** * **Using algebra to solve problems such as areas of shapes.** |
| **Week 4**  **Formulae.** | * **Writing formulae.** * **Substitution.** * **Rearranging formulae.** |
| **Week 5**  **Functions.** | * **Use functions to find inputs and outputs.** |
| **Week 6**  **Review and test week.** | * **Review all topics covered this term.** * **End of term test. This test will cover this terms work only.** * **End of term activities.** |

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| **Term 4** | |
| **Week 1**  **Tables and charts.** | * **Design and use data collection sheets.** * **Bar charts and pictograms.** |
| **Week 2**  **Pie charts.** | * **Understand that pie charts show proportion.** * **Draw a simple pie chart.** * **Draw a more complicated pie chart.** * **Anylse pie charts.** |
| **Week 3**  **Scatters graphs.** | * **Draw and interpret scatter graphs.** * **Describe correlation.** * **Draw a line of best fit.** * **Identify outliers.** |
| **Week 4**  **Line Graphs.** | * **Plot coordinates in all four quadrants.** * **Draw lines such as x = 4 and y = -2 etc.** * **Draw lines such as y = 2x or y = x+1 .** |
| **Week 5**  **Line Graphs.** | * **Plot any straight line graph. Y = mx + c** * **Find the equation of a straight line.** |
| **Week 6**  **Review and test week.** | * **Review all topics covered this term.** * **End of term test.** * **End of term activities.** |

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| **Term 5** | |
| **Week 1**  **Probability.** | * **Be able to write probabilities as fractions decimals or percentages.** * **Find the probability of a given event.** * **Know that the probabilities of mutually exclusive events always = 1.** |
| **Week 2**  **Probability.** | * **List the outcomes of two or more events.** * **Use sample space diagrams to list outcomes of more complicated events.** * **Use sample space diagrams to find probabilities.** |
| **Week 3**  **Perimeter** | * **Workout the perimeters of rectangles, triangles and other shapes.** * **Workout the perimeters of compound shapes.** |
| **Week 4**  **Area.** | * **Workout the areas of rectangles, triangles and other shapes.** * **Workout the area of compound shapes.** |
| **Week 5**  **Volume.** | * **Workout the volume of rectangles, triangles and other shapes.** * **Workout the volume of compound shapes.** |
| **Week 6**  **Review and test week.** | * **Review all topics covered this term.** * **End of term test.** * **End of term activities.** |

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| **Term 6** | |
| **Week 1**  **Circles** | * **Recognise terms used in circle work.** * **Discover pi.** * **Find the circumference of a circle.** |
| **Week 2**  **Circles** | * **Find the area of a circle.** * **Find the perimeter and area of a semicircle and quarter circle.** |
| **Week 3**  **Symmetry** | * **Draw reflections in the x and y axis.** * **Work out the order of rotational symmetry.** |
| **Week 4**  **Review week** | * **Review all topics covered this term.** |
| **Week 5**  **Review and test week** | * **Review all topics covered this year.** * **End of year test.** * **End of term activities.** |
| **Week 6**  **Maths activities week** | * **End of year maths activities.** |
| **Week 7**  **Activities week** | * **Activities week.** |