**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.**

|  |
| --- |
| **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.**
 |

|  |
| --- |
| **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.**
 |

|  |
| --- |
| **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.**
 |

|  |
| --- |
| **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.**
 |

|  |
| --- |
| **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.**
 |

|  |
| --- |
| **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.**
 |