** Mathematics Faculty**

**Year 10 Unit 4 Overview**

**Fractions/Decimals/Percentages**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Fractions/**  **Decimals/**  **Percentages** | I can calculate equivalent fractions/simplifying fractions/improper fractions and mixed numbers |  |  |  |
| I can calculate a fraction of amounts |  |  |  |
| I can multiply and divide fractions |  |  |  |
| I can add and subtract fractions |  |  |  |
| I can convert between fractions, decimals and percentages |  |  |  |
| I can calculate the percentage of amounts |  |  |  |
| I can calculate percentage increase and decrease |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Comparing and ordering fractions and using this to solve problems  (MW 25/26 CM 135/146/139/140) | Formative assessment strategies e.g. MWBs, whole class questioning, Diagnostic Questions, SLOP time with self-assessment, Live Marking etc.  Assessment is also supported with our use of ILOs that alternate between Basic Skills Checks one week and then a more individual ILO the following week through Maths watch and Corbett maths (see learning focus).  Finally, every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | Fraction, equivalent, simplify, improper fraction, mixed number, numerator, denominator |
| **2** | Finding a fraction of a quantity or measurement and use this to solve problems  (CM 137) | Fraction, numerator, denominator, multiply, divide |
| **3** | Multiplying a fraction by a fraction and a whole number and simplify where possible  (MW 73 CM 142) | Fraction, Multiply, numerator, denominator, simplify |
| **4** | Dividing a fraction by a fraction and a whole number and simplify where possible  (MW 74 CM 134) | Fraction, divide, simplify, multiply, numerator, denominator |
| **5** | Using a written method to add and subtract fractions with different denominators  (MW 71a CM 133) | Fraction, addition, subtraction, numerator, denominator, simplify, equivalent |
| **6** | Recalling the methods of all four operations involving fractions when given as a mixture | Fraction, addition, subtraction, numerator, denominator, simplify, equivalent |
| **7** | Converting between fractions and decimals and vice versa  (MW 84/85 CM 121-131) | Fractions, Decimals, Percentages, Convert |
| **8** | Converting between percentages and decimals; finding a percentage of an amount and calculating simple interest  (MW 86/87 CM 234/235) | Percentage, amount, divide, multiply |
| **9** | Calculating percentage increase and decrease without a calculator  (MW 108 CM 238) | Percentage, amount, divide, multiply, increase, decrease |
| **10** | Calculating percentage increase and decrease with and without a calculator using multipliers and calculating VAT  (MW 108 CM 238) | Percentage, amount, divide, multiply, increase, decrease |