****

**Mathematics Faculty**

**Year 8 Spring Term 1 – Delta Scheme**

**Unit 5 Overview - Fractions, Decimals and Percentages**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Fractions, Decimals and Percentages** | I can simplify fractions and find equivalent fractions. |  |  |  |
| I can convert improper fractions to mixed numbers and vice versa. |  |  |  |
| I can use the four operations with fractions and mixed numbers. |  |  |  |
| I can calculate reciprocals. |  |  |  |
| I can solve problems involving fractions. |  |  |  |
| I can convert between fractions, decimals and percentages. |  |  |  |
| I can order and compare fractions, decimals and percentages. |  |  |  |
| I can express a quantity as a fraction and percentage of another. |  |  |  |
| I can calculate percentages of amounts. |  |  |  |
| I can calculate percentage increases and decreases. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Finding equivalent fractions and writing fractions in their simplest form. Changing between mixed numbers and improper fractions (CM clips 135, 139, 140 & 146) | 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, set through Century Learning and Corbettmaths.  Finally, units are assessed through skills checks and half termly assessments, as part of our Assessment Calendar in Mathematics. | fraction, numerator, denominator, equivalent, simplify, cancel, improper fraction, mixed number, multiply, divide, convert |
| **2** | Adding and subtracting fractions and mixed numbers (CM clip 133) | fraction, numerator, denominator, equivalent, simplify, mixed number, improper, sum, difference |
| **3** | **Calculating reciprocals of numbers** (CM clip 145) | reciprocal, numerator, denominator, fraction |
| **4** | Multiplying and dividing fractions and mixed numbers (CM clips 142 & 134) | fraction, numerator, denominator, equivalent, simplify, mixed number, improper, product |
| **5** | Solving problems involving fractions (CM clips 133, 134 & 142) | fraction, numerator, denominator, equivalent, mixed number, improper, product, sum, difference |
| **6** | **Converting between fractions, decimals and percentages** (CM clips 121 - 129) | equivalence, fraction, numerator, denominator, percentage, decimal |
| **7** | **Ordering and comparing fractions, decimals and percentages** (CM clips 129 – 131) | equivalence, fraction, numerator, denominator, percentage, decimal, order, ascending, descending, compare |
| **8** | Expressing quantities as a fraction or percentage of another (CM clips 136 & 237) | fraction, percentage, quantity, equivalent, multiply, divide |
| **9** | Calculating percentages of amounts (CM clips 234 & 235) | percentage, per cent, hundredth, calculate, divide, multiply |
| **10** | Calculating percentage increases and decreases (CM clip 239) | calculate, divide, hundredth, percentage, increase, decrease |