** Mathematics Faculty**

**Year 8 Spring Term 1 – Theta 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 change between mixed numbers and improper fractions. |  |  |  |
| I can use the four operations with fractions. |  |  |  |
| I can calculate reciprocals. |  |  |  |
| I can compare decimals. |  |  |  |
| I can find equivalent fractions, percentages and decimals |  |  |  |
| I can order and compare fractions, percentages and decimals. |  |  |  |
| I can calculate percentages of amounts. |  |  |  |
| I can express a quantity as a fraction or percentage of another. |  |  |  |
| I can compare quantities using percentages. |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | |  |  | | --- | --- | | Finding equivalent fractions and writing fractions in their simplest form (CM clips 135 & 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 |
| **2** | **Changing between mixed numbers and improper fractions** (CM clips 139 & 140) | improper fraction, mixed number, multiply, divide, convert |
| **3** | **Adding and subtracting fractions with different denominators** (CM clip 133) | numerator, denominator, add, subtract, equivalent, LCM |
| **4** | **Multiplying fractions by another fraction or an integer** (CM clip 142) | fraction, integer, numerator, denominator, multiply |
| **5** | Calculating reciprocals (CM clip 145) | reciprocal, integer, fraction, decimal, divide |
| **6** | **Dividing fractions by another fraction or an integer** (CM clip 134) | fraction, integer, numerator, denominator, divide |
| **7** | |  |  | | --- | --- | | Solving problems involving fractions (CM clips 133, 142 & 134) |  | | fraction, numerator, denominator, add, subtract, equivalent, lowest common multiple, improper fraction, mixed number, multiply, divide |
| **8** | Ordering and comparing decimals with a different number of decimals places (CM clip 95) | decimal, place value, decimal place, order, compare |
| **9** | |  |  | | --- | --- | | Finding equivalent fractions, decimals and percentages (CM clip 129) |  | | equivalent, fraction, decimal, percentage, simplify, multiply, divide |
| **10** | Ordering and comparing fractions, decimals and percentages (CM clip 131) | decimal, place value, order, compare, fraction, percentage, equivalent |
| **11** | **Calculating percentages of amounts** mentally and **on a calculator** (CM clips 234 & 235) | percentage, per cent, hundredth, calculate, divide, multiply |
| **12** | |  |  | | --- | --- | | Expressing quantities as a fraction or percentage of another. Comparing quantities using percentages (CM clips 136 & 237) |  | | fraction, percentage, quantity, equivalent, multiply, divide, compare |