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**Mathematics Faculty**

**Unit 5 Overview**

**Fractions, Decimals and Percentages**

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| **Topic** | **Key Ideas** | **Progress** | | |
| **R** | **A** | **G** |
| **Fractions, Decimals and Percentages** | I can use the four operations with mixed numbers |  |  |  |
| I can solve problems involving fractions |  |  |  |
| I can recognise which fractions give recurring decimals |  |  |  |
| I can order and compare fractions, decimals and percentages |  |  |  |
| I can express a quantity as a fraction and percentage of another |  |  |  |
| I can calculate percentage change |  |  |  |
| I can calculate reciprocals |  |  |  |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Adding and subtracting fractions by writing them with a common denominator – including mixed numbers (MW clip N36 and CM clip 133) | 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, which alternate between Basic Skills Checks one week and then a more individual ILO the following, set through Mathswatch and Corbettmaths (see learning focus).  Finally every unit is assessed half termly as part of our Assessment Calendar in Mathematics. | fraction, numerator, denominator, common, equivalent, simplify, mixed number, improper, sum, difference |
| **2** | Multiplying and dividing fractions – including mixed numbers (MW clips N37a & N37b and CM clips 142 & 134) | fraction, numerator, denominator, equivalent, simplify, mixed number, improper, product |
| **3** | Fraction problem solving including fractions of amounts, ordering fractions and the 4 rules of fractions (MW clips N33, N34, N36, N37a & N37b and CM clips 133, 134 & 142) | fraction, numerator, denominator, equivalent, simplify, mixed number, improper, product, sum, difference |
| **4** | Converting between fractions and decimals including mixed numbers and identifying which denominators give terminating or recurring decimals | recurring, terminating, notation, prime factors, division |
| **5** | Converting between fractions, decimals and percentages and using this equivalence to compare and order quantities (MW clip N32 and CM clips 129 - 131) | equivalence, notation, ascending, descending, greatest, least, fraction, numerator, denominator, percentage, decimal |
| **6** | Calculating percentage change mentally and using a calculator with single multipliers (MW clip R9b and CM clip 239) | calculate, divide, hundredth, mentally, percentage, increase, decrease, multiplier, decimal |
| **7** | Calculating percentage profit and loss (CM clip 233) | percentage, change, original, difference, multiply, divide, profit, loss |
| **8** | Finding reciprocals of numbers including whole numbers and fractions. Is there a link with dividing fractions? (CM clip 145) | reciprocal, numerator, denominator, unit fraction, application |