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| **Title of unit:** | Fractions Decimals and Percentages |
| **Overview of unit:** | Fractions, decimals and percentages conversions  Fractions   * Equivalent fractions * Fraction of quantities * Multiplying, dividing, adding and subtracting fractions * Mixed numbers   Decimals   * Recurring decimals to fractions   Percentages   * Percentage of quantities * Percentage increase and decrease * Percentage change * Compound interest -appreciation and depreciation |
| **Cross-curricular/ extra-curricular links:** | Art/Design – mixing paint as a ratio; the Golden Ratio  MFL – exchange rates |
| **Literacy/ numeracy links:** | Worded problems/exam questions  Keywords displayed on all PPts - fraction, decimal, percentage, equivalent, order, add, subtract, multiply, divide, increase, decrease, amount/quantity, reverse, compound interest, depreciation  Written plenaries |

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| **Grade:** | **Learning objective:** | **Resources:** |
| **1** | Find equivalent fractions.  Simplify fractions.  Understand ‘per cent’ means ‘out of 100’.  Order decimals. | [Equivalent fractions, simplifying fractions and ordering fractions](https://www.piximaths.co.uk/fractions)  [Percentages](https://www.piximaths.co.uk/percentages)  [Adding, subtracting and ordering decimals](https://www.piximaths.co.uk/decimals) |
| **2** | Order fractions.  Calculate fractions of quantities.  Convert between fraction decimals and percentages  Calculate percentages of quantities. | [Equivalent fractions, simplifying fractions and ordering fractions](https://www.piximaths.co.uk/fractions)  [Fractions, decimals and percentages (FDP) intro](https://www.piximaths.co.uk/fdp-equivalence)  [Percentages of amounts without a calculator, Percentages](https://www.piximaths.co.uk/percentages) |
| **3** | Add, subtract, multiply and divide fractions.  Multiply and divide decimals.  Increase or decrease a quantity by a given percentage.  Compare fractions, decimals and percentages. | [Adding and subtracting fractions, Multiplying and dividing fractions](https://www.piximaths.co.uk/fractions)  [Dividing decimals, Multiplying decimals](https://www.piximaths.co.uk/decimals)  [Percentages](https://www.piximaths.co.uk/percentages)  [Fractions, decimals and percentages (FDP) intro](https://www.piximaths.co.uk/fdp-equivalence) |
| **4** | Calculate percentage change.  Calculate with mixed numbers. | [Calculating percentage change](https://www.piximaths.co.uk/percentages)  [4 operations of mixed numbers](https://www.piximaths.co.uk/fractions) |
| **5** | Work out reverse percentage problems.  Work out compound interest and depreciation | [Reverse percentages](https://www.piximaths.co.uk/percentages)  [Compound interest and depreciation](https://www.piximaths.co.uk/percentages) |
| **6** | Convert recurring decimals to fractions and fractions to recurring decimals. | [FDP equivalence, recurring decimals](https://www.piximaths.co.uk/fdp-equivalence) |
| **7** |  |  |
| **8** |  |  |
| **9** |  |  |