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| **Title of unit:** | Fractions Decimals and Percentages |
| **Overview of unit:** | Fractions, decimals and percentages conversionsFractions* 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 RatioMFL – exchange rates |
| **Literacy/ numeracy links:** | Worded problems/exam questionsKeywords displayed on all PPts - fraction, decimal, percentage, equivalent, order, add, subtract, multiply, divide, increase, decrease, amount/quantity, reverse, compound interest, depreciationWritten 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 percentagesCalculate 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** |  |  |