Ratio and proportion

Grade	I can….
9	Solve problems involving exponential growth and decay
8	Calculate limits of accuracy for compound measures and interpret results Recognise exponential growth and decay Apply concepts of average and instantaneous rate of change in different contexts
7	Understand the formulae for compound interest and depreciation Convert a recurring decimal into a fraction Solve complex problems involving percentage increase and decrease Construct formulae for direct and inverse proportion Apply concepts of average and instantaneous rate of change.
6	Calculate and understand compound interest and depreciation Calculate the original amount given the percentage change and new value Interpret the gradient at a point on a curve as the instantaneous rate of change
5	Calculate and understand simple interest and depreciation Use and understand inversely proportional change e.g. recipes Construct graphs of rates of change
4	Increase or decrease an amount by a percentage using a multiplier Divide an amount into a given ratio Use and understand directly proportion change e.g. recipes Construct graphs of rates of change
3	Increase or decrease an amount by a percentage Understand the relationship between ratios and fractions Simplify a ratio to its simplest form Divide an amount into a given ratio with two parts Interpret and use graphs of conversion/change
2	Calculate percentages and fractions of amounts Identify equivalent fractions and simplify to their simplest form Identify simple equivalence between fractions, decimals and percentages Calculate a fraction of an amount Identify equivalent ratios
1	Identify and shade fractions of objects Work out simple fractions and percentages of amounts
E3	Recognise fractions as several parts of the whole and spot equivalent fractions
E2	Begin to find halves and quarters of shapes and numbers of objects Double and half numbers from 1 to 10 mentally
E1	Begin to find half of a shape and half of a small number of objects Double to at least number 5 mentally