

# Fractions and Percentages

## Small Steps

- ▶ Convert fluently between key fractions, decimals and percentages R
- ▶ Calculate key fractions, decimals and percentages of an amount without a calculator R
- ▶ Calculate fractions, decimals and percentages of an amount using calculator methods R
- ▶ Convert between decimals and percentages greater than 100%
- ▶ Percentage decrease with a multiplier
- ▶ Calculate percentage increase and decrease using a multiplier
- ▶ Express one number as a fraction or a percentage of another without a calculator
- ▶ Express one number as a fraction or a percentage of another using calculator methods

# Fractions and Percentages

## Small Steps

- ▶ Work with percentage change
- ▶ Choose appropriate methods to solve percentage problems
- ▶ **Find the original amount given the percentage less than 100%** H
- ▶ **Find the original amount given the percentage greater than 100%** H
- ▶ **Choose appropriate methods to solve complex percentage problems** H

H Denotes Higher Tier GCSE content

R Denotes 'review step' – content should have been covered in Year 7

# Standard Form

## Small Steps

- Investigate positive powers of 10
- Work with numbers greater than 1 in standard form
- Investigate negative powers of 10
- Work with numbers between 0 and 1 in standard form
- Compare and order numbers in standard form
- Mentally calculate with numbers in standard form
- Add and subtract numbers in standard form
- Multiply and divide numbers in standard form
- Use a calculator to work with numbers in standard form

# Standard Form

## Small Steps

▶ Understand and use negative indices

H

▶ Understand and use fractional indices

H

H denotes Higher Tier GCSE content

R Denotes “review step” – content should have been covered in Year 7

# Number Sense

## Small Steps

- ▶ Round numbers to powers of 10, and 1 significant figure R
- ▶ Round numbers to a given number of decimal places
- ▶ Estimate the answer to a calculation
- ▶ **Understand and use error interval notation** H
- ▶ Calculate using the order of operations R
- ▶ Calculate with money
- ▶ Convert metric measures of length
- ▶ Convert metric units of weight and capacity

# Number Sense

## Small Steps

- ▶ Convert metric units of area H
- ▶ Convert metric units of volume H
- ▶ Solve problems involving time and the calendar

H denotes higher strand and not necessarily content for Higher Tier GCSE  
R denotes “review step” – content should have been covered at KS3