

Year 7 Overview

The yearly overview provides suggested timings for each block of learning, which can be adapted to suit different term dates or other requirements.



	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Algebra Sequences		Algebra Algebraic notation and substitution		Algebra Expressions and equations		Number Place value, ordering and rounding		Number Four operations		Statistics Averages and range	Number Rounding and estimation
Spring	Statistics Graphing data			Number Fractions, decimals and percentages			Number Directed number		Number Fractions and percentages of amounts		Geometry and measures Perimeter and area	
Summer	Ratio, proportion and rates of change Speed, distance and time			Number Properties of number			Number Add and subtract fractions			Geometry and measures Angles and polygons		

Year 7 Autumn Half Term 1



Block 1 – Weeks 1 and 2

Sequences

- Describe and continue linear and non-linear sequences
- Represent sequences in diagram and number forms
- Term-to-term rules
- Compare numerical and graphical sequences

Block 2 – Weeks 3 and 4

Algebraic notation and substitution

- Use function machines
- Use algebraic notation
- Substitute into expressions
- Use inverse operations

Block 3 – Weeks 5 and 6

Expressions and equations

- Understand equality and equivalence
- Collect like terms
- Solve 1-step and 2-step equations

Notes/Links/Interleaving

- Revisit arithmetic strategies from KS2 when substituting and solving equations
- Allow students to use a calculator where appropriate
- Build on inverse operations for 1-step equations
- Link sequence patterns to algebraic rules
- Use diagrams, tables and algebraic representations
- Students need to be able to work with a variety of scientific formulae and solve 1-step and 2-step equations

Extend steps

Sequences

- Find missing terms

Year 7 Autumn Half Term 2



Block 4 – Weeks 7 and 8

Place value, ordering and rounding

- Order integers and decimals
- Use place value to compare integers and decimals
- Use number lines with integers and decimals
- Round integers and decimals

Block 5 – Weeks 9 and 10

Four operations

- Use the four operations with integers and decimals
- Apply written and mental methods
- Use estimation and related calculations
- Use the order of operations

Block 6 – Week 11

Averages and range

- Find the mean, median, mode and range
- Interpret averages and range

Block 7 – Week 12

Rounding and estimation

- Round to significant figures
- Estimate calculations
- Use approximation to check answers
- Identify overestimates and underestimates

Notes/Links/Interleaving

- Revisit place value, four operations and order of operations from KS2
- Order of operations will be revisited with directed numbers
- Build on arithmetic and inverse operations for estimation and checking
- Choose when to use mental, written or calculator methods
- Link powers of 10 and standard form to place value
- Students calculate the mean and use rounding and estimations throughout science

Extend steps

Place value, ordering and rounding

- Powers of 10, Numbers greater than 1 in standard form, Negative powers of 10, Numbers between 0 and 1 in standard form

Four operations

- Multiply by 0.1 and 0.01, Divide by a decimal

Rounding and estimation

- Understand and use error interval notation

Year 7 Spring Half Term 1



Block 1 – Weeks 1, 2 and 3

Graphing data

- Represent data in charts and graphs
- Plot and interpret coordinates in the first quadrant
- Use scatter graphs and lines of best fit
- Interpret trends and patterns in data

Block 2 – Weeks 4, 5 and 6

Fractions, decimals and percentages

- Compare fractions, decimals and percentages
- Use FDP equivalence
- Order fractions and decimals
- Use fractions as operators

Notes/Links/Interleaving

- Revisit place value and calculation strategies from earlier in Year 7 to support with FDP understanding
- Build on KS2 coordinate and graph skills
- Link FDP equivalence to fraction and percentage work from KS2
- Link representing data and using graphs in other areas of the curriculum
- Students interpret and draw bar charts and scatter graphs in a variety of scientific contexts

Extend steps

Fractions, decimals and percentages

- Fractions, decimals and percentages greater than 1

Year 7 Spring Half Term 2



Block 3 – Weeks 7 and 8

Directed number

- Represent directed numbers on a number line
- Compare and order positive and negative numbers
- Calculate with directed numbers
- Use the order of operations
- Use a calculator with directed numbers

Block 4 – Weeks 9 and 10

Fractions and percentages of amounts

- Find fractions of amounts
- Find percentages of amounts
- Calculate percentage increase and decrease
- Find whole amounts from a fractional part

Block 5 – Weeks 11 and 12

Perimeter and area

- Convert metric units of length
- Find the perimeter of polygons and compound shapes
- Find the area of rectangles, parallelograms and triangles
- Find the area of trapezia and compound shapes
- Solve problems with perimeter and area

Notes/Links/Interleaving

- Revisit FDP equivalence and calculation strategies from earlier in Year 7
- Build on directed number, area and perimeter from KS2
- Use perimeter problems to build on equations and collecting like terms
- Revisit rounding from earlier in Year 7
- Choose when to use mental, written or calculator methods
- Students apply their understanding of directed number in science to calculations with boiling points, charge of particles and velocity

Extend steps

Fractions and percentages of amounts

- Use a percentage to find the whole
- Solve problems with fractions and percentages greater than 1

Perimeter and area

- Form expressions with perimeter and area

Year 7 Summer Half Term 1



Block 1 – Weeks 1, 2 and 3

Speed, distance and time

- Convert between units of time
- Solve problems involving speed, distance and time
- Calculate speed, distance and time
- Interpret and draw distance–time graphs

Block 2 – Weeks 4, 5 and 6

Properties of number

- Identify multiples, factors and primes
- Use prime factorisation
- Use square, cube and triangular numbers
- Find the HCF and LCM

Notes/Links/Interleaving

- Revisit directed number and calculation strategies from earlier in Year 7
- Choose when to use mental, written or calculator methods
- Build on learning from KS2 factors, multiples and primes
- Link factors and multiples to earlier fraction work and prepare for adding and subtracting fractions later in Year 7
- Students apply their understanding of speed, distance and time in a variety of scientific contexts through substituting into formulae and drawing and interpreting distance-time graphs

Extend steps

Speed, distance and time

- Calculate speed from a distance-time graph

Properties of number

- Explore higher powers and roots
- HCF and LCM from a Venn diagram
- Use factors to simplify calculations

Year 7 Summer Half Term 2



Block 3 – Weeks 7, 8 and 9

Add and subtract fractions

- Simplify fractions and find equivalent fractions
- Convert between mixed numbers and improper fractions
- Add and subtract fractions
- Calculate with improper fractions and mixed numbers

Block 4 – Weeks 10, 11 and 12

Angles and polygons

- Use angle notation
- Apply angle facts
- Classify polygons
- Solve problems with angles
- Calculate angles in polygons

Notes/Links/Interleaving

- Revisit equivalent fractions from earlier in Year 7
- Build on understanding of factors, multiples, primes, HCF and LCM
- Build on understanding of angle facts from KS2
- Choose when to use mental, written or calculator methods

Extend steps

Add and subtract fractions

- Use equivalence to add and subtract decimals and fractions
- Add and subtract simple algebraic fractions
- Substitution and solving equations with fractions

Angles and polygons

- Investigate angles in parallel lines
- Angles in a polygon
- Simple proofs