Our Learning Journey: Year 7 Maths

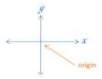
Knowledge over time

Year 8



The gradient and y-intercept

Using coordinates





Mean

Mode

Fibonacci sequence

Algebra

Statistics & Probability



Drawing straight line graphs

π

Range

Median

Picture sequences



nth term

Combining fractions, percentages and ratios to solve problems

Perimeter

Area & Circumference of Circles

Geometry & Measures

Algebra

2 : 3
2 to 3

Area of shapes using formulae



Volume of 3D Solids

Number patterns

Number

Problems involving ratios

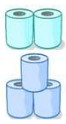
Simplifying ratios

562 → 600
233 → 200
600 x 200 = 120,000

Rounding to significant figures

Rounding decimals

Number



Using proportion to solve problems

Using ratios

Estimation

Rounding to 10, 100, 1000

2x + 5 = 19
-5 -5
2x = 14
÷2 ÷2
x = 7

Solving equations with 1 step

Equations with brackets

Algebra

Problem Solving

Number

%

Equations with 2 steps

Inequalities

Using maths to solve problems

Calculating percentages of amounts

Using percentages

Writing percentages

Equivalent fractions, decimals & percentages

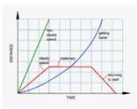
Calculations with fractions

Fractions of amounts

Number

Number

Factorising expressions



$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$

Mixed numbers & improper fractions



Simplifying fractions

Simplifying expressions with letters

Distance-time graphs

Pie charts

Correlation



Statistics & Probability

Algebra

Calculating speed

$s = \frac{d}{t}$

Using metric units

Bar charts

Scatter graphs

a×b

Expanding brackets



Substituting values

Order of operations

Number skills needed for all units

Geometry & Measures

Algebra

Number

$E=MC^2$

Using formulae in maths and other subjects

Using letters in maths

Using a calculator



Use of indices

Year 7 Maths