Peacehaven Community School

Aspire • Believe • Contribute • Achieve

Maths Learning Journey

Maths Learning Journey
Year 7 to 11

Exam Practise

Paper 1 (calc)
Paper 2 (non-calc),
Paper 3 (calc)

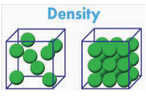
Can I Solve simultaneous equations using a range of techniques?

Can I calculate with quadratic equations and graphs?

Mock Papers

Can I solve problems involving trigonometry?

Density



Mock Papers

YEAR 11

Gap analysis

What types of charts and graphs should I use?

Can I solve problems involving circles?

ARITHMETIC SEQUENCE
-6, 1, 8, 15, 22
+7 +7 +7 +7
GEOMETRIC SEQUENCE
2, 4, 8, 16, 32
x2 x2 x2 x2

How to calculate different statistics from different forms of data?

How to represent and interpret data and probability

How do solve problems using ratio and proportion ?

Can I calculate with angles? including Trigonometry for Higher.

Can I find the area of and volume of 2d and 3d shapes? (where possible)

Can I solve problems involving area and volume ?

How can I solve problems involving similarity and congruence?

Can I solve multi-step equations fluently?

Am I fluent in algebra calculations?

How do I calculate with angles in polygons and parallel lines ?

What can be explored with linear graphs?

Can I reason using coordinates and algebra?

Can I transform and construct in 2d?

Can I use good multiplicative reasoning?

Can I use multiplicative reasoning to solve problems ?

Can I represent most mathematical ideas algebraically ?

$\sqrt[3]{64} = ?$

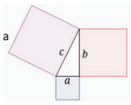
How do I reason using proportion?

How do I calculate probabilities?

What are similar shapes?

How do I reason using geometry?

How do I transform a shape?



How to use pythagoras's theorem

Can I calculate with fractions decimals and percentages?

Am I fluent in number calculations?

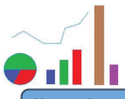
YEAR 10

How to calculate compound rates

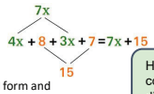
How to solve ratio and proportion problems

What maths do I need to deal with money?

How do I reason using numbers?



Estimation
The fine art of guessing



How do I form and solve equations?

How can I accurately construct in 2 and 3 dimensions?

What are the properties of 3d shapes?

How to construct accurate diagrams?

How do I apply my knowledge of percentages ?

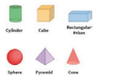
How can I reason with data?

How to find symmetry and reflections?

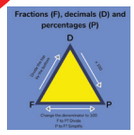
YEAR 9

How to understand and use use straight line graphs ?

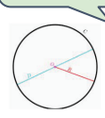
How can I reason using algebra?



What is congruency



How can I deepen my geometric understanding?



How to find the area of circles and trapezia?

How to embed my understanding of number

50

How do I represent very large or small numbers using standard form?

How can I accurately use algebra?

How do I Expand Brackets and solve equations?

Which data representations can I use for problems in context?

How do I approach problems in the cartesian plane?

How do I solve problems involving angles in parallel lines and polygons?

How do I apply number skills in different contexts?

How do I gain fluency working with fractions and percentages?

How do I apply rules of algebra to indices ?

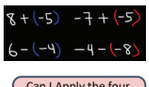
How do I approach sequences algebraically ?

How can I represent Probability and Data?

How to use Venn diagrams and sample space diagrams in probability?

How do I Multiply and divide fractions?

What is proportional reasoning



How do I use angle facts to solve problems in triangles, quadrilaterals and on parallel lines?

Can I Apply the four operations to negative numbers?

Can I add and subtract fractions?

Can I calculate fractions and percentages of amounts?

YEAR 8

How should I approach problems involving multiplicative change?

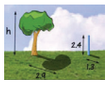
How do I approach number based problem solving?

How do I classify and draw angles and apply this knowledge to Pie Charts and polygons?

How can I use all for operations efficiently with integers and decimals?

Can I find the HCF and LCM using product of prime numbers?

What are Ratio and Scale?



Can I solve problems involving multiplication and division?

Can I reason with lines and angles?

Can I solve problems involving addition and subtraction?

How do I show Equality and Equivalence ?

How do I begin to think algebraically?

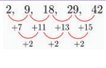
YEAR 7

Ada Lovelace
Mathematician

Can I convert between and compare fractions decimals and percentages?

How can I order and find equivalence in numbers?

Can I compare order and round any number?



Can I use algebraic notation accurately?

Can I recognise and describe different types of sequences.?

Algebra | Number | Ratio and Proportion | Statistics | Geometry