

# Mathematics Learning Journey



$$\frac{6}{10} + 0.3$$

## Fractional Thinking

- Addition and subtraction with fractions

## Algebraic Thinking

- Sequences
- Understand and use algebraic notation
- Equality and equivalence

## Directed Number

- Four operations with directed number

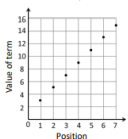


## Place Value and Proportion

- Place value
- Ordering integers and decimals
- Fraction, decimal and percentage equivalence

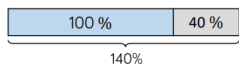
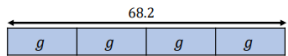
## Application of Number

- Solving problems with addition and subtraction
- Multiplication and division
- Fractions and decimals of an



Position	1	2	3	4
Term	3	5	7	9

$$2(x + 4) \quad 2x + 8$$



## Lines and Angles

- Constructing, measuring and using geometric notation

## Reasoning with Number

- Developing number sense
- Sets and probability
- Prime numbers and proof

## Reasoning with Geometry

- Deduction
- Rotation and Translation
- Pythagoras' Theorem

## Reasoning with Number

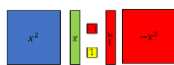
- Numbers
- Using percentages
- Maths and money

## Constructing in 2 and 3 Dimensions

- Three dimensional shapes
- Constructions and congruency

## Reasoning with Algebra

- Straight line graphs
- Forming and solving equations
- Testing conjectures



## Similarity

- Congruence, similarity and enlargement
- Trigonometry

## Developing Algebra

- Representing solutions of equations and inequalities
- Simultaneous equations

## Geometry

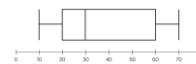
- Angles and bearings
- Working with circles
- Vectors

## Proportions and Proportional Change

- Ratio and fractions
- Percentages and interest
- Probability

## Reasoning with Data

- The data handling cycle
- Measures of location



## Reasoning with Proportion

- Enlargement and similarity
- Solving ratio and proportion problems
- Rates

## Representations

- Solving problems using graphs, tables and algebra

## Reasoning

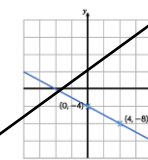
- Multiplicative
- Geometric
- Algebraic

## Algebra

- Expanding and factorising
- Changing the subject
- Functions

## Graphs

- Gradients and lines
- Non-linear graphs
- Using graphs



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## Delving into Data

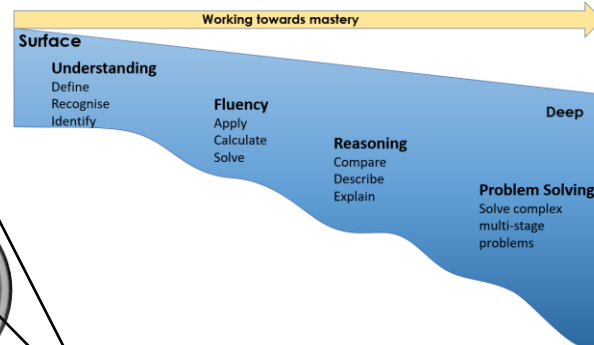
- Collecting, representing and interpreting data

## Revision and Communication

- Transforming and constructing
- Listing and describing
- Show that...

Examinations

Further Maths  
A Level Maths  
Core Maths



## Using Number

- Non-calculator methods
- Types of number sequences
- Indices and roots