RSA Mathematics

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

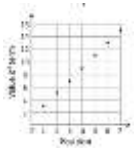
Fractional Thinking
- Addition and subtraction with fractions

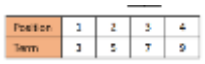
Directed Number
- Four operations with directed number

Application of Number
- Solving problems with addition and subtraction
- Multiplication and division
- Fractions and decimals of amounts

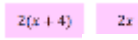
Place Value and Proportion
- Place value
- Ordering integers and decimals
- Fraction, decimal and percentage equivalence

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

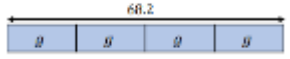




Position	1	2	3	4
Term	3	5	7	9



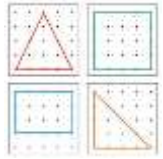
$2(x + 4)$ $2x + 8$



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



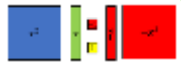
Reasoning with Number
- Numbers
- Using percentages
- Maths and money

Proportional Reasoning
- Ratio and scale
- Multiplicative change
- Multiplying and dividing fractions

Representations
- Working in the cartesian plane
- Representing Data
- Tables and Probability

Constructing in 2 and 3 Dimensions
- Three dimensional shapes
- Constructions and congruency

Reasoning with Algebra
- Straight line graphs
- Forming and solving equations
- Testing conjectures



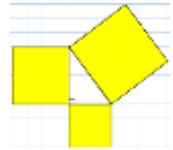
Algebraic Techniques
- Brackets, equations and inequalities
- Sequences
- Indices

Developing Number
- Fractions and percentages
- Standard index form
- Number sense

Developing Geometry
- Angles in parallel lines and polygons
- Area of trapezia and circles
- Line symmetry and reflection

Reasoning with Proportion
- Enlargement and similarity
- Solving ratio and proportion problems
- Rates

Representations
- Solving problems using graphs, tables and algebra



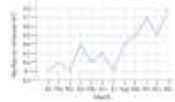
Similarity
- Congruence, similarity and enlargement
- Trigonometry

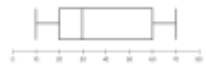
Developing Algebra
- Representing solutions of equations and inequalities
- Simultaneous equations

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

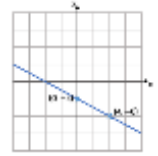




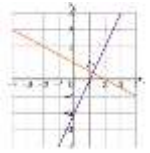
Reasoning
- Multiplicative
- Geometric
- Algebraic

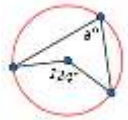
Algebra
- Expanding and factorising
- Changing the subject
- Functions

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



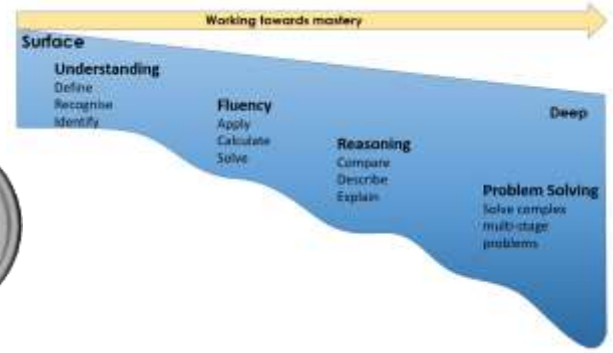
Revision and Communication
- Transforming and constructing
- Listing and describing
- Show that...





Examinations

Further Maths
A Level Maths
Core Maths



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

Delving into Data
- Collecting, representing and interpreting data

White Rose Maths

	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	**Algebraic Thinking**						**Place Value and Proportion**					
	Sequences	Understanding and using algebraic notation			Equality and equivalence		Place value and ordering integers and decimals			Fraction, decimal and percentage equivalence		
Spring	**Applications of Number**						**Directed Number**			**Fractional Thinking**		
	Solving problems with addition & subtraction		Solving problems with multiplication and division				Four operations with directed number			Addition and subtraction of fractions		
Summer	**Lines and Angles**						**Reasoning with Number**					
	Constructing, measuring and using geometric notation			Developing geometric reasoning			Developing number sense		Sets and probability		Prime numbers and proof	

	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	Proportional Reasoning						Representations					
	Ratio and scale		Multiplicative change		Multiplying and dividing fractions		Working in the Cartesian plane			Representing data		Tables & Probability
Spring	Algebraic techniques						Developing Number					
	Brackets, equations and inequalities				Sequences	Indices	Fractions and percentages			Standard index form		Number sense
Summer	Developing Geometry						Reasoning with Data					
	Angles in parallel lines and polygons			Area of trapezia and circles		Line symmetry and reflection	The data handling cycle				Measures of location	

	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	**Reasoning with Algebra**						**Constructing in 2 and 3 Dimensions**					
	Straight line graphs		Forming and solving equations		Testing conjectures		Three-dimensional shapes			Constructions and congruency		
Spring	**Reasoning with Number**						**Reasoning with Geometry**					
	Numbers		Using percentages		Maths and money		Deduction		Rotation and translation		Pythagoras' Theorem	
Summer	**Reasoning with Proportion**						**Representations and Revision**					
	Enlargement and similarity		Solving ratio & proportion problems		Rates		Probability		Algebraic representation	Revision		

	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	**Similarity**						**Developing Algebra**					
	Congruence, similarity and enlargement			Trigonometry			Equations and inequalities		Representing solutions		Simultaneous equations	
Spring	**Geometry**						**Proportions and Proportional Change**					
	Angles & bearings		Working with circles		Vectors		Ratios & fractions		Percentages and Interest		Probability	
Summer	**Delving into data**						**Using number**					
	Collecting, representing and interpreting data						Non-calculator methods		Types of number and sequences		Indices and Roots	