Heron Hall ACADEMY

Subject : Mathematics	Year 7 Curriculum Map				
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What am I learning?	<u>Algebraic Thinking</u> • Exploring Sequences • Understanding and using algebraic notation • Equality and Equivalence	<u>Place value and proportion</u> • Place value and ordering • Fraction, Decimal and Percentage Equivalence	<u>Applications of number</u> • Solving problems with addition, subtraction , multiplication and division • Fractions and percentages of amounts	<u>Directed number and Fractional Thinking</u> • Directed number • Fractional Thinking	<u>Lines and Angles</u> • Constructing measuring and using geometric notation • Developing geometric reasoning	<u>Reasoning with Number</u> • Developing number sense • Sets and probability • Prime numbers and proof
Why am I learning this?	This will develop your skills in being able to recognise numbers and patterns. You will be able to spot this numerically, diagrammatically and graphically.	You will be able to convert between Fractions, decimals and percentages by understanding the equivalence between them.	You will begin to apply your basic knowledge on these number skills by working on everyday worded problems.	You will expand on your work with negatives from primary. You will see negative numbers in different contexts.	You will learn how to use measuring equipment for angles and constructing shapes. You will also practice drawing pie charts using angles.	This will help you to find strategies to solve complex calculations. You will also apply what you learnt in FDP to probability.
How will I be supported?	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples Given	• Tasks will be broken down • Examples Given	• Tasks will be broken down • Examples Given	• Tasks will be broken down • Examples Given	• Tasks will be broken down • Examples Given
How will I be challenged?	• Problem Solving • Application skills	• Problem Solving • Application skills	• Problem Solving • Application skills	• Problem Solving • Application skills	• Problem Solving • Application skills	• Problem Solving • Application skills

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Subject : Mathematics			Year 8 Curriculum Map			
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What am I learning?	**Proportional Reasoning** • Ratio and Scale • Multiplicative change • Multiplying and dividing fractions	**Representations** • Working in the cartesian plane • Representing data • Tables and probability	**Algebraic Techniques** • Brackets equations and inequalities • Sequences • Indices	**Developing Number** • Fractions and Percentages • Standard index form • Number sense	**Developing with Geometry** • Angles in parallel lines and polygons • Area of trapezia and circles • Lines of symmetry and reflection	**Reasoning with Data** • The data handling cycle • Measures of location
Why am I learning this?	You will start to deepen your understand of equivalence and the links between ratio and fractions.	You will start to apply algebraic rules to straight-line graphs. This will help towards your understanding in year 9 when looking at m and c.	You will explore expanding and factorising single brackets, as well as building on your year 7 knowledge on sequences introducing algebra	You will start to apply your skills of converting by using both calculator and non-calculator methods.	You will build on your angle knowledge by looking at parallel lines and properties of polygons.	You will start to use different graphs and charts to make comparisons between the data. You will learn how to use statistical language.
How will I be supported?	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples given	• Tasks will be broken down • Examples given
How will I be challenged?	• Problem solving • Application skills	• Problem solving • Application skills	• Problem solving • Application skills	• Problem solving • Application skills	• Problem solving • Application skills	• Problem solving • Application skills

Subject : Mathematics		Year 9 Curriculum Map				
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What am I learning?	**Reasoning with Algebra** - Straight line graphs - Forming and solving equations - Testing conjectures	**Constructing in 2 and 3 dimensions** - Three dimensional shapes - Constructions and congruency	**Reasoning with number** - Numbers - Using percentages - Maths and money	**Reasoning with Geometry** - Deduction - Rotation and translation - Pythagoras' Theorem	**Reasoning with proportion** - Enlargement and similarity - Rates - Ratio and proportion	**Representations and Revision** - Probability - Algebraic Representation
Why am I learning this?	You will be introduced to m and c and understand their values applying them to abstract and real life content.	You will now build on your knowledge of shapes and apply it to surface area, volume and plans and elevations.	You will apply your knowledge of number and percentages to look at maths in a financial context. This will prepare you for adult life.	You will be able to compare the different transformation forms so far. You will also be introduced to vectors to describe a translation.	You will start to apply your knowledge of proportion to direct and inverse proportion.	You will begin to look at representing ad interpreting data using a Venn diagram.
How will I be supported?	- Task will be broken down - Examples given	- Tasks will be broken down - Examples given	- Tasks will be broken down - Examples given	- Tasks will be broken down - Examples given	- Tasks will be broken down - Examples given	- Tasks will be broken down - Examples given
How will I be challenged?	- Problem solving - Application skills	- Problem solving - Application skills	- Problem solving - Application skills	- Problem solving - Application skills	- Problem solving - Application skills	- Problem solving - Application skills

Subject : Mathematics		Year 10 Curriculum Map				
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What am I learning?	**Similarity** • Congruence similarity and enlargement • Trigonometry	**Developing Algebra** • Equations and inequalities • Simultaneous equations	**Geometry** • Angles and bearings • Working with circles • Vectors	**Proportions and proportional change** • Ratios and fractions • Percentages and interest • Probability	**Delving into data** • Collecting representing and interpreting	**Using number** • Types of number and sequences • Indices and roots
Why am I learning this?	You will be able to make links between similarity and trigonometry at this stage using your skills learnt in KS3	You will deepen your understanding by looking at the difference between equations and inequalities; you will also explore how number lines and graphs can be used to represent the solutions to inequalities.	You will begin to link your knowledge on angles by being introduced to bearings. You will see where this is used in real life.	You will build on your knowledge from KS3. You will be introduced to tree diagrams with calculating probability	You will explore the different methods to collect and represent data. You will learn how to analyse and compare between two data sets.	You will consolidate your knowledge of understanding powers and applying index laws
How will I be supported?	• GCSE question examples • Intervention	• GCSE question examples • Intervention	• GCSE question examples • Intervention	• GCSE questions examples • intervention	• GCSE questions examples • intervention	• GCSE question examples • Intervention
How will I be challenged?	• Higher grade tasks • Complex problems	• Higher grade tasks • Complex problems	• Higher grade tasks • Complex problems	• Higher grade tasks • Complex problems	• Higher grade tasks • Complex problems	• Higher grade tasks • Complex problems

Subject : Mathematics			Year 11 Curriculum Map			
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What am I learning?	**Graphs** • Gradients and lines • Non-linear graphs • Using graphs	**Algebra** • Expanding and factorising • Changing the subject • Functions	**Reasoning** • Multiplicative • Geometric • Algebraic	**Revision and communication** • Transforming and constructing • Listing and describing • Show that	Revision and Examinations	Revision and Examinations
Why am I learning this?	You will deepen your understanding of a gradient and intercept using the equation y=mx+c. you will also look at quadratic and cubic graphs.	You will be revising your algebra skills by reviewing your knowledge on expanding and factorising.	You will apply your knowledge and look at problems in real life context to deepen your reasoning skills	You will practise your skills in communicating in various aspects of mathematics		
How will I be supported?	• GCSE question examples • Intervention	• GCSE questions examples • Intervention	• GCSE questions • Intervention	• GCSE questions • Interventions		
How will I be challenged?	• Higher grade questions • Complex problems	• Higher grade questions • Complex problems	• Higher grade questions • Complex problems	• Higher grade questions • Complex problems		