HAILEY HALL SCHOOL

Believe | Strive | Achieve

Hailey Hall School Maths Curriculum Map

Maths Curriculum - Intent

We believe mathematical intelligence is expandable, and that every child can learn mathematics, given the appropriate learning experiences within and beyond the classroom. Our curriculum map reflects our high expectations for every child. Every student is entitled to master the key mathematical content for their age, by receiving the support and challenge they specifically need.

Our curriculum has three key principles

1. Deep Understanding

Our practice embeds the importance of deep understanding, as equating progress with learning new procedures and rules means many students will miss out on a depth of understanding. We achieve this by allowing the pupils to represent concepts in a variety of different ways using both objects and pictures. We also support the development of functional memory using a spiral curriculum, allowing pupils to revisit topics in greater depth each year.

2. Mathematical thinking

We believe that it is essential for students to develop mathematical thinking in and out of the classroom to fully master mathematical concepts. We want students to think like mathematicians, not just DO the maths. We believe that during the learning experience students should; explore, wonder, question, conjecture, experiment and make theories in order to guide their own journey

3. Mathematical Language

We believe that pupils should be encouraged to use mathematical language throughout their learning to deepen their understanding of concepts.

The way students speak and write about mathematics has been shown to have an impact on their success in mathematics. We therefore use a carefully sequenced, structured approach to introducing and reinforcing mathematical vocabulary throughout our lessons, so students have the opportunity to work with word problems from the beginning of their learning.

Alongside these three key principles, problem solving is at the heart of mathematics. By structuring our curriculum so that all students in a year group are learning the same content at the same time, they have longer to focus on each topic. Our aim is to create the optimal conditions for students to learn through problem solving and to learn to solve problems to develop lifelong transferable skills

Throughout our curriculum we also aim to ensure our pupils gain a love and appreciation for all the mathematics around them and will fully enjoy mathematics

Why this subject is important:

- A good level of numeracy is required for all jobs.
- A good qualification in mathematics shows you can think quickly.
- A good qualification in mathematics shows you are able to solve problems.
- A good qualification in mathematics will often mean a higher salary when you start work.

How parents / carers can help:

Provide them with a quiet place to do homework and revision, assisting with home learning where possible, practicing times tables regularly.

Useful websites:

Mathswatch, BBC Bitesize, Corbett Maths.

Progression routes and career opportunities:

You will need mathematics qualifications for all jobs, whatever you apply for. Some jobs that especially need mathematics are:

Accountancy, Games designer, Engineering, Police, Pilot, Architect, Doctor and Scientist.

Who to contact and how if you have a query regarding your child:

Name	Position	Email Address	Telephone
Mrs Sarah Crabtree	**Maths Coordinator**	**scrabtree@haileyhall.herts.sch.uk**	**01992 465208**

Curriculum Maps by year

The overview from White Rose Mathematics is given for each year.

The curriculum maps are currently under construction and will be completed by September 2026 to include a more detailed breakdown of each topic area.

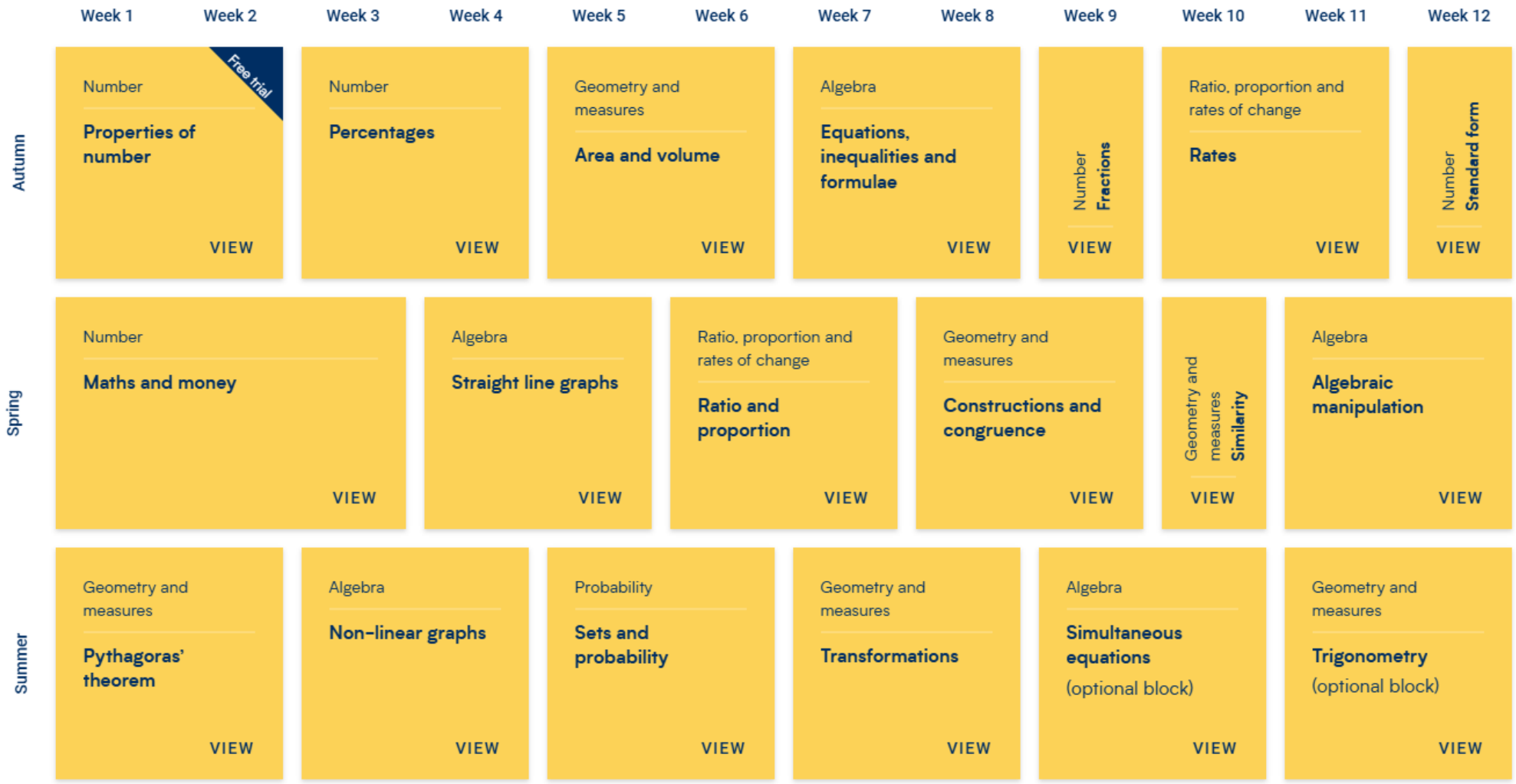
Year 7


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
Free trial
Algebra
Sequences
VIEW
Algebra
Algebraic notation and substitution
VIEW
Algebra
Expressions and equations
VIEW
Number
Place value, ordering and rounding
VIEW
Number
Four operations
VIEW
Statistics
Averages and range
VIEW
Number
Rounding and estimation
VIEW
Spring
Statistics
Graphing data
VIEW
Number
Fractions, decimals and percentages
VIEW
Number
Directed number
VIEW
Number
Fractions and percentages of amounts
VIEW
Geometry and measures
Perimeter and area
VIEW
Summer
Number
Speed, distance and time
VIEW
Number
Properties of number
VIEW
Number
Add and subtract fractions
VIEW
Geometry and measures
Angles and polygons
VIEW

Year 8


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
Free trial
Ratio, proportion and rates of change
Ratio
VIEW
Ratio, proportion and rates of change
Proportion and scale
VIEW
Algebra
Algebraic manipulation
VIEW
Algebra
Coordinates and graphs
VIEW
Number
Multiply and divide fractions
VIEW
Geometry and measures
Symmetry and reflection
VIEW
Spring
Geometry and measures
Area, volume and density
VIEW
Algebra
Equations and inequalities
VIEW
Number
Percentages
VIEW
Algebra
Indices
VIEW
Number
Standard form
VIEW
Statistics
Interpret and represent data
VIEW
Summer
Geometry and measures
Angles in parallel lines and polygons
VIEW
Probability
Tables and probability
VIEW
Geometry and measures
Circles
VIEW
Statistics
Graphs and charts
VIEW
Algebra
Sequences
VIEW
Revision and consolidation

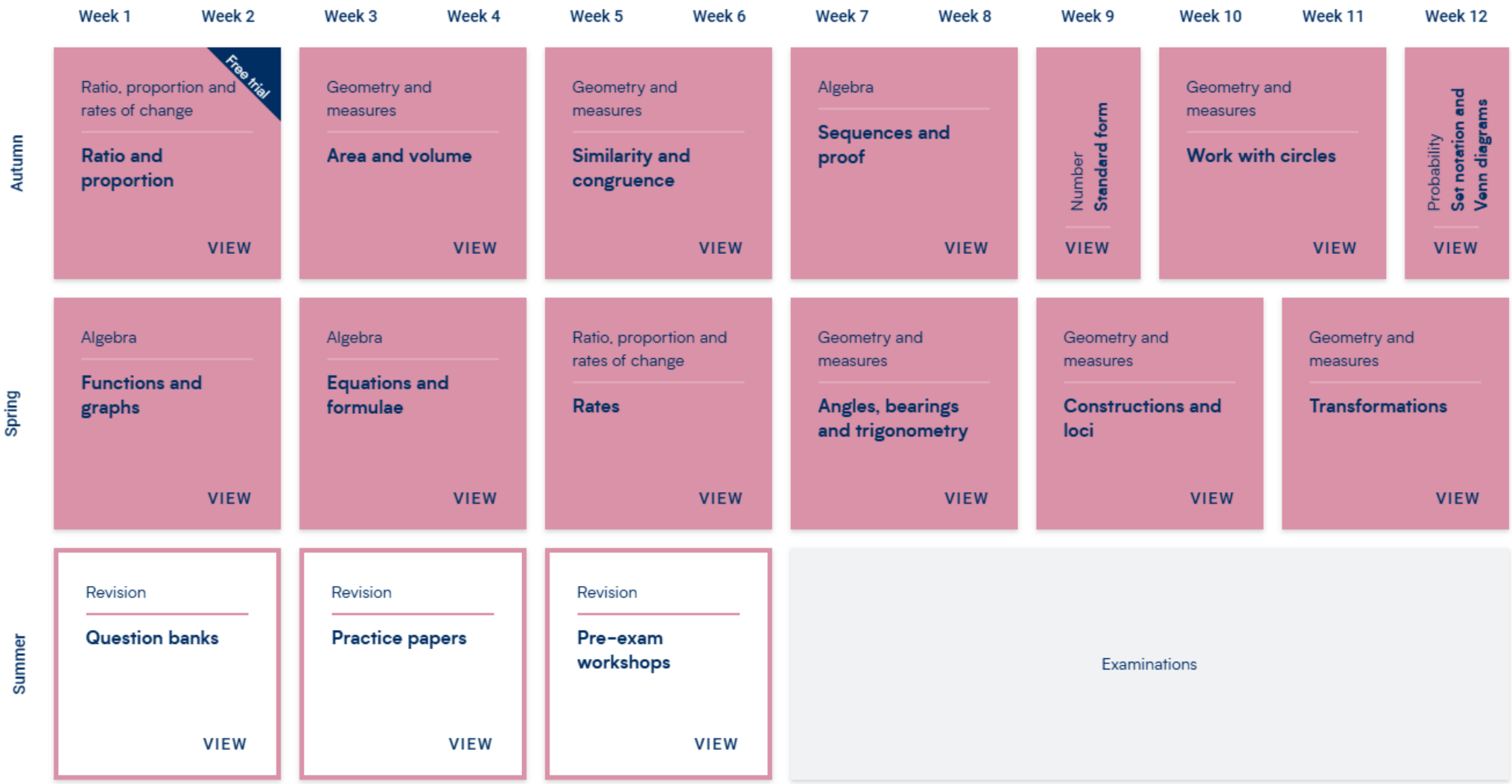
Year 9


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
Free trial
Number
Properties of number
VIEW
Number
Percentages
VIEW
Geometry and measures
Area and volume
VIEW
Algebra
Equations, inequalities and formulae
VIEW
Number
Fractions
VIEW
Ratio, proportion and rates of change
Rates
VIEW
Number
Standard form
VIEW
Spring
Number
Maths and money
VIEW
Algebra
Straight line graphs
VIEW
Ratio, proportion and rates of change
Ratio and proportion
VIEW
Geometry and measures
Constructions and congruence
VIEW
Geometry and measures
Similarity
VIEW
Algebra
Algebraic manipulation
VIEW
Summer
Geometry and measures
Pythagoras' theorem
VIEW
Algebra
Non-linear graphs
VIEW
Probability
Sets and probability
VIEW
Geometry and measures
Transformations
VIEW
Algebra
Simultaneous equations
(optional block)
VIEW
Geometry and measures
Trigonometry
(optional block)
VIEW

Year 10


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
Free trial
Algebra
Algebraic manipulation
VIEW
Algebra
Equations, inequalities and formulae
VIEW
Algebra
Quadratic expressions and equations
VIEW
Number
Percentages
VIEW
Ratio, proportion and rates of change
Ratio and scale
VIEW
Number
Work with fractions
VIEW
Spring
Number
Non-calculator methods
VIEW
Algebra
Straight line graphs
VIEW
Probability
Probability
VIEW
Number
Rounding and estimation
VIEW
Geometry and measures
Perimeter, area and volume
VIEW
Statistics
Interpret and represent data
VIEW
Algebra
Non-linear graphs
VIEW
Summer
Geometry and measures
Angles
VIEW
Statistics
Graphs and diagrams
VIEW
Geometry and measures
Vectors
VIEW
Number
Factors, powers and surds
VIEW
Geometry and measures
Pythagoras' theorem and trigonometry
VIEW
Algebra
Simultaneous equations
VIEW

Year 11


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
Free trial
Ratio, proportion and rates of change
Ratio and proportion
VIEW
Geometry and measures
Area and volume
VIEW
Geometry and measures
Similarity and congruence
VIEW
Algebra
Sequences and proof
VIEW
Number
Standard form
VIEW
Geometry and measures
Work with circles
VIEW
Probability
Set notation and Venn diagrams
VIEW
Spring
Algebra
Functions and graphs
VIEW
Algebra
Equations and formulae
VIEW
Ratio, proportion and rates of change
Rates
VIEW
Geometry and measures
Angles, bearings and trigonometry
VIEW
Geometry and measures
Constructions and loci
VIEW
Geometry and measures
Transformations
VIEW
Summer
Revision
Question banks
VIEW
Revision
Practice papers
VIEW
Revision
Pre-exam workshops
VIEW
Examinations