# Dawn House School: Maths Overview 2024/25

## Engage, Develop, Communicate, Aspire



# Subject: Maths

**Subject Intent:** Through mathematics, we **engage** children in active learning that enables students to envisage or experience real life situations where mathematics may be necessary. Our curriculum content **develops** students' knowledge to enable them to solve real life and abstract concepts by providing opportunities to investigate and apply knowledge which becomes increasingly sophisticated. We promote an ethos of positivity around maths and its place in the world and support pupils to **communicate** confidently by ensuring an appropriate pace and depth suited to individual learning styles is utilised. The mathematics curriculum aims to enable our pupils to make a positive contribution and to **aspire** to meet their full potential in all aspects of life at Dawn House School and beyond.

### Develop:

- To enable students to have numeracy skills for life.
- To equip students with necessary tools to function in life after school.
- To instil confidence in maths based on a sound knowledge of underlying concepts
- To encourage students to be enquiring and resilient when faced with problems
- To enable students to progress in their learning and reach their potential
- To facilitate and support all students in making steps of achievement both large and small
- Some students cannot access exam situations and therefore benefit from coursework and observation based curricula.

#### Engage:

- Explore mathematics using a staged approach. i.e. practical, pictorial, abstract.
- Use dyscalculic and dyslexia friendly methods
- Rich activities which allow students to explore depth in each topic.
- Emphasis on opportunities for kinaesthetic learning
- Opportunities to explore breadth of curriculum at all levels
- Numeracy activities at the start of every maths lesson
- Accreditation through exam or non-exam methods.
- A wide range of practical mathematical equipment
- Practical application of numeracy through educational visits.
- Numeracy activities in every maths lesson.
- Games and fun activities which draw on mathematical and numeracy skills.

#### Communicate:

- To use academic vocabulary accurately in order to describe and discuss mathematical problems.
- To be able to spell all numbers.
- To be able to read times and dates in orthodox formats
- To be able to understand information contained in tables of information e.g. bus timetable, calendar.

### Aspire:

- To have skills to function in everyday life beyond school.
- Understand time, money and common units for measures and how to apply these.
- Experience real life situations where maths is important e.g. shopping, banking, different occupations and leisure activities including planning and preparing for these.
- Preparation for higher learning.
- Accreditation through recognised exam boards.

Primary 1 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
P1 (EYFS/Y1 WRM)	<ul><li>Exploring numicon</li><li>Ordering numicon</li><li>Exploring numicon patterns</li></ul>	<ul><li>Numicon links</li><li>Numicon groups</li></ul>	<ul><li>Numicon addition</li><li>Numicon subtraction</li></ul>	<ul><li>Double and half</li><li>Numicon subtraction</li><li>Half and sharing</li></ul>	<ul> <li>Addition parts and whole</li> <li>Subtraction parts and whole</li> </ul>	<ul> <li>Addition and subtraction links</li> <li>Teen numbers addition and subtraction</li> </ul>
Primary 2 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
<b>P2</b> (WRM Y1)	Place value	<ul><li>Addition and subtraction</li><li>Shape</li></ul>	<ul><li>Place Value</li><li>Addition and subtraction</li></ul>	<ul><li>Length and Height</li><li>Mass and Volume</li></ul>	<ul> <li>Multiplication and Division</li> <li>Fractions</li> <li>Position and Direction</li> </ul>	<ul><li>Place Value</li><li>Money</li><li>Time</li></ul>
Junior						
Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Junior (WRM Y2/Y3)	Place Value	<ul><li>Addition and Subtraction</li><li>Shape</li></ul>	<ul><li>Money</li><li>Multiplication and Division</li></ul>	<ul> <li>Length and Height</li> <li>Mass, Capacity and Temperature</li> </ul>	<ul><li>Fractions</li><li>Time</li></ul>	<ul><li>Statistics</li><li>Position and Direction</li><li>Consolidation</li></ul>
KS3 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
KS3 JC (WRM Y2)	Place Value	<ul><li>Addition and Subtraction</li><li>Shape</li></ul>	<ul><li>Money</li><li>Multiplication and Division</li></ul>	<ul> <li>Length and Height</li> <li>Mass, Capacity and Temperature</li> </ul>	<ul><li>Fractions</li><li>Time</li></ul>	<ul><li>Statistics</li><li>Position and Direction</li><li>Consolidation</li></ul>
KS3 DE (WRM Y5)	<ul><li>Place value</li><li>Addition and subtraction</li></ul>	<ul><li>Multiplication and Division</li><li>Fractions</li></ul>	<ul><li>Multiplication and division</li><li>Fractions</li></ul>	<ul> <li>Decimals and Percentages</li> <li>Perimeter and Area</li> <li>Statistics</li> </ul>	<ul><li>Shape</li><li>Position and Direction</li><li>Decimals</li></ul>	<ul><li>Negative Numbers</li><li>Converting Units</li><li>Volume</li></ul>

KS3 AD (WRM Y4)	<ul><li>Place value</li><li>Addition and subtraction</li></ul>	Multiplication     and division	<ul><li>Multiplication and division</li><li>Length and Perimeter</li></ul>	<ul><li>Fractions</li><li>Decimals</li></ul>	<ul><li>Decimals</li><li>Money</li><li>Time</li></ul>	<ul><li>Shape</li><li>Statistics</li><li>Position and Direction</li></ul>
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KS4 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
KS4 SW (AQA Entry Level) - 2 year programme	<ul><li>Properties of Number</li><li>Mock Test</li><li>Test</li></ul>	<ul><li>The four operations</li><li>Mock Test</li><li>Test</li></ul>	<ul><li>Ratio</li><li>Mock Test</li><li>Test</li></ul>	<ul><li>Money</li><li>Mock Test</li><li>Test</li></ul>	<ul> <li>The Calendar and time</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul><li>Area</li><li>Life Skills</li><li>Timetable Rockstars</li></ul>
KS4 LC (AQA ELC Edexcel L1 - Number and Measure Y1 of 2)	<ul> <li>Properties of Number</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>The four operations</li> <li>Mock Test</li> <li>Test</li> <li>Ratio</li> <li>Mock Test</li> <li>Test</li> <li>Test</li> </ul>	<ul> <li>Money</li> <li>Mock Test</li> <li>Test</li> <li>The Calendar and time</li> <li>Mock Test Test</li> </ul>	<ul> <li>Measures</li> <li>Mock Test</li> <li>Test</li> <li>Geometry</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul><li>Statistics</li><li>Mock Test</li><li>Test</li></ul>	<ul> <li>Fluency</li> <li>Revisit key topics through project</li> <li>Life Skills</li> </ul>
KS4 MW / KS5 DH (AH) (AQA Entry Level) - 1 year programme	<ul> <li>Properties of Number</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>The four operations</li> <li>Mock Test</li> <li>Test</li> <li>Ratio</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>Money</li> <li>Mock Test</li> <li>Test</li> <li>The Calendar and time</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>Measures</li> <li>Mock Test</li> <li>Test</li> <li>Geometry</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul><li>Statistics</li><li>Mock Test</li><li>Test</li></ul>	<ul> <li>Geometry</li> <li>Shape</li> <li>Area, perimeter and volume</li> <li>Life Skills</li> </ul>

KS5 Overview	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
KS4 MW /KS5 Group 3 (MS) (Number & Measure Y2)	Scale diagrams	• Measure	<ul><li>Algebra</li><li>Revision and consolidation activities</li></ul>	<ul> <li>Revision and consolidation activities</li> <li>Mock papers</li> </ul>	<ul> <li>Revision and consolidation activities</li> <li>Exams</li> </ul>	<ul><li>Life Skills</li><li>Practical Maths Project</li></ul>
KS5 Group 1	AIM Award EL2:     Time	<ul> <li>AIM Award EL2: Handling</li> </ul>	AIM Award EL2:     Shape	<ul> <li>AIM Award EL2: Multiplication</li> </ul>	Revision	<ul><li>Practical Project</li><li>Life Skills</li></ul>

(AIM Awards)		Information and Data			Addition and     Subtraction	
KS5 Group 2 (AQA Entry Level) - 1 year programme	<ul> <li>Properties of Number</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>The four operations</li> <li>Mock Test</li> <li>Test</li> <li>Ratio</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>Money</li> <li>Mock Test</li> <li>Test</li> <li>The Calendar and time</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul> <li>Measures</li> <li>Mock Test</li> <li>Test</li> <li>Geometry</li> <li>Mock Test</li> <li>Test</li> </ul>	<ul><li>Statistics</li><li>Mock Test</li><li>Test</li></ul>	<ul> <li>Geometry</li> <li>Shape</li> <li>Area, perimeter and volume</li> <li>Life Skills</li> </ul>

KS4/5 GCSE Overview	Autumn term	Spring term	Summer term
Year 1	<ul> <li>Integers &amp; place value</li> <li>Decimals</li> <li>Indices, powers &amp; roots</li> <li>Factors, multiples &amp; primes</li> <li>Algebra (basics)</li> <li>Expressions &amp; substitutions into formulae</li> </ul>	<ul> <li>Tables, charts and graphs</li> <li>Scatter graphs</li> <li>Fractions, decimals &amp; percentages</li> <li>Percentages</li> </ul>	<ul> <li>Forming &amp; solving linear equations</li> <li>Linear inequalities</li> <li>Properties of shapes, parallel lines &amp; angle facts</li> <li>Interior &amp; exterior angles of polygons</li> </ul>
Year 2	<ul><li>Sampling &amp; averages</li><li>Perimeter &amp; area</li><li>Basic volume &amp; 3D shapes</li></ul>	<ul><li>Real life graphs</li><li>Straight line graphs</li><li>Transformations</li></ul>	<ul><li>Ratio &amp; proportion</li><li>Pythagoras</li><li>Trigonometry</li><li>Probability</li></ul>
Year 3	<ul> <li>Multiplicative reasoning</li> <li>Plans &amp; elevations</li> <li>Construction, loci &amp; bearings</li> </ul>	<ul> <li>Quadratic equations – expanding &amp; factorising</li> <li>Quadratic equations – graphs</li> <li>Circles, cylinders, cones &amp; spheres</li> <li>Fractions &amp; reciprocals</li> <li>Indices and standard form</li> </ul>	<ul> <li>Similarity &amp; congruence in 2D shapes</li> <li>Vectors</li> <li>Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations</li> </ul>