Ormiston Beachcroft Academy Vision for Education - Maths

At OBCA, our approach is grounded in the values of **Trust, Excellence, Ambition, and Motivation**. We build strong relationships through trust, set high expectations to achieve excellence, inspire ambition in every student, and foster motivation to succeed. These values align with the **Ormiston Academies Trust principles of Ambition, Learning, Perseverance, Collaboration, and Inclusion**, driving our shared vision for every child to thrive. Through this ethos, we aim to secure both **currency and character**, enabling students to gain the qualifications that open life opportunities while developing the personal qualities needed to succeed beyond school

Intent

The Mathematics curriculum at our Alternate Provision (AP) school is designed to:

- Provide a **broad, balanced, and ambitious curriculum** that is accessible to all pupils, regardless of prior attainment or educational background.
- Re-engage learners who may have experienced disrupted or negative educational experiences by developing **confidence, resilience, and a positive attitude** towards mathematics.
- Ensure that all pupils acquire **essential numeracy skills** required for independent living, further education, and employment.
- Offer **clear progression pathways**, enabling pupils to achieve meaningful accreditation appropriate to their ability, including Functional Skills, Entry Level Certificates, and GCSE Mathematics.
- Embed mathematics in **real-world and practical contexts**, ensuring relevance to pupils' daily lives and future aspirations.
- Promote the development of **problem-solving, reasoning, and logical thinking skills** that extend beyond the classroom.

Implementation

The curriculum is implemented through a carefully sequenced and flexible programme that reflects the needs of AP learners:

- **Baseline assessment** on entry identifies strengths, knowledge gaps, and learning needs, informing individual learning plans.
- A **spiral curriculum** revisits key concepts in number, ratio, algebra, geometry, statistics, and probability, ensuring consolidation and progression.
- Teaching is structured around **small steps and scaffolded approaches**, employing the concrete–pictorial–abstract model to secure understanding.
- **Personalised pathways** are in place, with accreditation routes matched to pupils' aspirations and ability levels.
- Learning is contextualised with **practical applications** (e.g., financial literacy, measurement in vocational contexts, interpreting timetables, budgeting) to enhance engagement and relevance.
- Teachers employ a range of strategies, including **manipulatives, visual aids, technology, and collaborative learning**, to meet diverse learning needs.
- Pupils are supported through **targeted interventions** delivered via 1:1 or small-group tuition, ensuring that misconceptions are addressed swiftly.
- Curriculum planning ensures preparation for external examinations, while also prioritising **functional numeracy for life skills** where formal examinations may not be the most appropriate pathway.

Impact

The impact of the Mathematics curriculum is measured through academic progress, personal development, and post-16 readiness:

- Pupils make **progress from their individual starting points**, with evidence gathered through formative and summative assessments.
- Improved levels of **confidence, resilience, and problem-solving ability** are demonstrated in classroom participation and learner voice.
- Pupils achieve **externally recognised qualifications**, supporting progression into further education, training, or employment.
- Pupils develop **transferable skills** such as financial management, timekeeping, and data interpretation, supporting independence in daily life.
- Data on attendance, engagement, and attainment evidences improved outcomes for learners who previously struggled in mainstream settings.
- Feedback from pupils, parents/carers, and post-16 providers indicates that learners are **well-prepared for their next steps**.

Assessment

Assessment is integral to the teaching and learning process in mathematics and is designed to support progress:

- **Initial baseline assessments** on entry establish prior attainment and inform personalised learning plans.
- **Formative assessment** is embedded in daily practice through questioning, retrieval tasks, low-stakes quizzes, and ongoing teacher observation.
- **Summative assessments** are conducted at key points in the year to measure progress against individual targets.

- Pupil progress is monitored regularly through tracking systems and reviewed in line with the school's assessment cycle.
- **Accreditation routes** (Functional Skills, Entry Level, GCSE) are carefully matched to pupils' abilities and aspirations, ensuring meaningful achievement.
- **Pupil reflection and self-assessment** are encouraged to develop metacognition and ownership of learning.
- Assessment outcomes inform planning, intervention, and reporting to stakeholders, ensuring accountability and transparency.

Curriculum Map/Programme of Study

Key Stage / Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Key Stage 3	**Unit 1** Integers and place value Decimals Indices, powers and roots Factors, multiples and primes	**Unit 1** Integers and place value Decimals Indices, powers and roots Factors, multiples and primes	**Unit 2** Algebra: the basics Expanding and factorising single brackets Expressions and substitution into formulae	**Unit 2** Algebra: the basics Expanding and factorising single brackets Expressions and substitution into formulae	**Unit 3** Tables Charts and graphs Pie charts Scatter graphs	**Unit 4** Fractions Fractions, decimals and percentages Percentages
Year 10	**Unit 5** Equations	**Unit 7** Statistics and sampling	**Unit 9** Real-life graphs	**Unit 10**	**Unit 12**	**Unit 14** Multiplicative reasoning

	Inequalities Sequences **Unit 6** Properties of shapes, parallel lines and angle facts Interior and exterior angles of polygons	The averages **Unit 8** Perimeter and area 3D forms and volume	Straight-line graphs	Transformations1: translations, rotations and reflections Transformations2: enlargement and combinations **Unit 11** Ratio Proportion	Right-angled triangles: Pythagoras and trigonometry **Unit 13** Probability I Probability II	Unit14 Assessment **Unit 15** Plans and elevations Constructions, loci and bearings
Year 11	**Unit 16** Quadratic equations: expanding and factorising Quadratic equations: graphs **Unit 17** Circles, cylinders, cones and spheres	**Unit 18** Fractions and reciprocals Indices and standard form **Unit 19** Similarity and congruence in 2D Vectors	**Unit 20** Rearranging equations, graphs of cubic, reciprocal functions and simultaneous equations	Mop up any missed topics Mock Exam	Revision and past paper	

Qualifications offered:

Level	Exam Board	Specification Code	Qualification title
GCSE	Pearson Edexcel	*Paper code: 1MA1/1F or 1MA1/1H	Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Mathematics (1MA1)
Entry Level Certificate	Pearson Edexcel	Pearson Edexcel Entry Level Certificate in Mathematics (NMA0)	Pearson Edexcel Entry Level Certificate