

1. Origins of the Curriculum

The aim of the Mathematics curriculum across all sites within the Raedwald Trust is to ensure that all learners develop their mathematical fluency, can reason using this fluency and apply their knowledge to solve a wide range of practical/functional problems.

We aim to provide our students opportunities to follow a programme of study based on the National Curriculum. It will build upon subject knowledge gained in KS2 whilst preparing them for the challenges of KS4 – whether this is in an Alternative Provision or if they have returned to mainstream education. Pupils entering our Trust are likely to be at different stages in their mathematical knowledge.

Initially they will be assessed for prior knowledge and will enter the programme of study at an appropriate level, progressing along curriculum strands – these strands will be revisited throughout the key stage to enable pupils to cover them regardless of when they enter the trust.

Designed for Alternative Provision (AP) this curriculum is deliberately tailored for the Raedwald Trust’s AP context and Pathways available at Parkside Keys Stage 3 (see table below) to meet a wide range of needs, with short term and fractional placements. Practical activities, real-world applications, and topic-based learning help engage students who may have previously disengaged from mainstream science education. The inclusion of personalised content ensures that reintegration into mainstream schools is as smooth and academically aligned as possible.

**Where the support is offered in their mainstream setting (or agreed as part of their pathway offer) pupils will follow the curriculum provided by their home schools.*

Pathways	Roll Status (full time/fractional)
KS3 Haven (6-24 weeks)	Dual Roll – fractional placement
Haven Highly Complex Yr9 (up to 2 years)	Dual Roll – fractional placement

The fundamental areas in our mathematics curriculum are:

- Number
- Algebra
- Ratio, proportion and rates of change
- Geometry and measurement
- Probability
- Statistics

The overview below is intended for those on a full-time offer. However, as the units are repeated each year it is also suitable for those on a part time offer and those joining us mid-way through the key stage. Bespoke learning packages and initial assessment will ensure that students will access the relevant content for the unit as outlined in the curriculum strands.

Overview of units of study across each year

	Autumn	Spring	Summer
Year 7	TBC	TBC	TBC
Year 8	TBC	TBC	TBC
Year 9	TBC	TBC	TBC

Adaptation of Teaching is based on a diet of high-quality teaching (EEF, 2022), comprehensive induction, baseline assessments and ongoing teacher evaluation. We recognise that many of our pupils may have missed key foundational learning due to inconsistent school attendance. For this reason, tasks are structured with built-in scaffolding, modelling, and differentiation to support accessibility. Curriculum design draws on principles from cognitive science—such as Rosenshine’s Principles of Instruction and dual coding—to enhance engagement and retention.



Induction, Individual Learning Plans (ILPs) and SEND information guide the support needed, which may include:

- Use of overlays for Irlen’s syndrome or dyslexia
- Additional scribing or use of technology
- Explicit vocabulary instruction, sentence starters and frameworks for scaffolding writing
- Practical learning and visual aids
- Flexible groupings and targeted interventions to close gaps in prior knowledge

These assessments identify each pupil’s subject-specific knowledge and SEND requirements. Pupils are taught through our pedagogical approach (EDI – explicit direct instruction).



Assessment and outcomes

We assess pupils for three key reasons:

- To identify what they know and do not know so we can plan the next steps in their learning journey.
- To understand their patterns of progress over time.
- To make informed judgements about their progress towards key educational markers and qualifications.

Good assessment practice ultimately adds value to pupil outcomes by enabling teachers and leaders to pinpoint what is having a positive impact and what needs refinement or adaptation for individual pupils.

At the start of a pupil's journey, we use subject-specific moderated assessments such as WRAT4 and CAT4 to baseline each student's understanding and profile their strengths and gaps within each subject strand. This baseline data directly informs planning so that teaching addresses gaps systematically and supports secure progress within each strand.

Assessment is ongoing and teachers record progress formally at the end of each half term. Using moderated, subject-specific assessments, teachers assess all students against the KS3 curriculum strands using a RAG (Red, Amber, Green) rating and a **Mastery Progress Grid**. Progress is discussed with students to help them understand their strengths, areas for development, and how this relates to their pathway towards GCSEs or Functional Skills qualifications, particularly from Year 9 onwards.

At each stage, we use assessment data to identify gaps in learning and adapt lessons and interventions to address them. For example, in maths, we use targeted interventions such as manipulatives (e.g., Numicon, base ten blocks) to build conceptual understanding for students who need concrete support before moving to abstract concepts. Small-group or one-to-one interventions are planned for key skills, and staff adapt delivery to ensure concepts are broken down in manageable steps, with plenty of opportunities for overlearning and practical application.

Across all subjects, we continually refine our teaching strategies to respond to assessment outcomes. This includes flexible grouping, scaffolded tasks, and personalised resources where appropriate to ensure every pupil can access the curriculum and make sustained progress.

Assessment is a continuous cycle that shapes teaching, supports pupils to know more and remember more, and ensures every pupil can achieve their potential.

Mathematics and the wider curriculum

Cultural Capital Within the Trust, we believe it is vital for all students to develop the cultural skills, knowledge and behaviours that will enable them to thrive in society and the world of work. The Mathematics curriculum is designed to build our learners' cultural capital, preparing them for their next stage in life. This is achieved in various ways, including teaching real-life skills such as reading timetables, managing budgets and finances, using recipes, and understanding speed, distance and time.

SMSC Mathematics helps students make sense of the world around them. We aim to enable every student to explore the connections between their numeracy skills and everyday life. Students are given opportunities to apply their maths skills in real-life contexts, solving practical problems and exploring the skills needed to approach these challenges.

Problem-solving and teamwork are at the heart of mathematics. Through creative thinking, discussion, explanation and presenting ideas, students develop confidence and independence. They are encouraged to explain their reasoning to each other, support peers in their learning, and work collaboratively to overcome challenges.

Within the curriculum, students also explore mathematical approaches from different cultures and historical contexts. For example, they learn about diverse multiplication methods and the origins of concepts such as Pythagoras' theorem, helping them develop an appreciation for the global and historical significance of mathematics.

British Values The Mathematics curriculum actively promotes British values such as tolerance and resilience. Students build resilience through tackling complex concepts and problem-solving tasks, learning from mistakes and being supported to improve their understanding. In statistics, they develop critical thinking skills, such as evaluating data sets and identifying potential bias.

Careers Pathways for future study and careers in STEAM subjects are promoted throughout lessons. When exploring mathematical topics, students are encouraged to consider how these skills are applied in the real world and in various vocational contexts. Lessons are linked to developing practical understanding relevant to IT, construction, cooking, sport, science, transport planning, finance and more. Staff aim to make mathematics meaningful by connecting it to the vocational interests and aspirations of each student.

Reading Students are supported to develop their reading skills at every opportunity. A range of texts is shared within lessons to prepare students for independent life, including reading menus, timetables, recipes, advertisements and construction plans.

Students are encouraged to read actively and supported to understand key vocabulary. Shared reading and choral reading are used when working with texts as a class. Staff explicitly teach the meaning of command words to strengthen students' understanding of mathematical questions. High standards of literacy, articulacy and the use of standard English are promoted throughout lessons, with displays used to reinforce key vocabulary and command words.