

Rationale

At The Forwards Centre, we recognise the importance of children receiving a high-quality maths education, as maths is “a universal language that enables understanding of the world” and “attainment in the subject is the key to opening doors”. We believe that every child can be successful in maths regardless of their starting point. The vast majority of our pupils have missed out on learning at some point in the past for a wide range of reasons. Our curriculum takes this into account and is personalised, flexible and designed to allow pupils to build self-confidence and re-engage with learning.

Contribution and Readiness

We ensure that the Maths curriculum:

- Gives pupils a secure understanding of the key concepts and basic facts to ensure that working memory is not overloaded when working on challenging activities that deepen understanding
- Provides pupils with opportunities to acquire a rich and developed vocabulary through the use of stem sentences, enabling them to communicate their ideas with mathematical precision as well as clarity
- Enables pupils to display a high level of pride in the presentation and understanding of their work
- Prepares pupils well for the next step on their academic journey, whether that be returning to a mainstream primary, a specialist provision or secondary school
- Provides opportunities to demonstrate an increased ability to work independently
- Overcoming Challenges: Maths often presents challenging problems that require effort and determination. Encouraging a growth mindset helps children learn the value of persistence
- Mistakes as Learning Opportunities: Maths teaches that errors are part of learning, promoting a culture of constructive feedback and improvement
- Group Activities: Collaborative problem-solving in maths teaches students to work together, respect different viewpoints, and value each other's contributions
- Peer Tutoring: Explaining mathematical concepts to classmates fosters empathy and patience

Underpinning all this is the recognition we have, that for pupils to succeed, we need to provide a positive, safe and stabilising setting. This requires us to ensure that pupils feel safe in making mistakes and understand that making mistakes are a vital part of learning. Pupils will be allowed to work at their own pace and will not be rushed through the curriculum until they have become secure in the topic and level they are working at. We aim to create an environment where pupils are free to develop a love for the subject without having to compare and compete against others.

Conduct and Morals

We ensure that pupils develop their own character attributes through the Maths curriculum by:

- Group Activities: Collaborative problem-solving in maths teaches students to work together, respect different viewpoints, and value each other's contributions

- Peer Tutoring: Explaining mathematical concepts to classmates fosters empathy and patience
- Following Procedures: Adhering to mathematical methods and rules helps children understand the importance of structure and discipline
- Respect for Time: Timed activities and routines in maths lessons teach punctuality and time management

Celebrating similarity and difference

We ensure that pupils celebrate similarity and difference through the Maths curriculum by:

- Collaborative Problem-Solving: Maths group activities provide opportunities for students to work together, learning from their peers' perspectives and celebrating diverse ways of thinking
- Peer Support: Encouraging students to help classmates fosters a sense of community and respect for varying levels of ability
- Data Handling Projects: Collecting and analysing data about classmates' preferences, backgrounds, or interests (e.g., favourite foods, languages spoken, hobbies) helps students see both their similarities and differences in a positive light.
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Caring for ourselves

We ensure that pupils learn to care for themselves through the Maths curriculum by:

- Emotional self-care helps children build resilience, which is crucial for persevering through challenging maths problems.
- A positive mindset about learning, nurtured through self-care practices, supports a growth-oriented attitude towards maths.
- Developing self-esteem through self-care and emotional support can help children feel more confident in their mathematical abilities.
- This confidence often leads to greater participation in class and willingness to tackle more complex tasks.
- Emotional well-being, a product of good self-care, fosters better communication and collaboration skills, which are essential during maths group activities and projects.

Culture and Creativity

We ensure that pupils learn about culture and creativity through the Maths curriculum by:

- Inclusivity: Incorporating diverse cultural references ensures that all children see their backgrounds reflected in lessons, boosting engagement and belonging.
- Collaborative Problem-Solving: Maths group activities provide opportunities for students to work together, learning from their peers' perspectives and celebrating diverse ways of thinking.
- Peer Support: Encouraging students to help classmates fosters a sense of community and respect for varying levels of ability.



Curriculum Design

Our curriculum is designed in such a way that allows progress to be made in small incremental steps, allowing pupils time to progress at their own speed. Our experience has shown us that stretching a pupil too far before they are ready can have a huge detrimental effect on our pupils. A carefully managed and implemented learning journey is part of each classes' weekly planning.

The curriculum is based around White Rose maths scheme and supplemented with a range of other resources, including NCETM, Learning by Questions, Splash Learn and Prodigy. This allows us to deliver high quality, standardised activities in each classroom while also allowing us the freedom and flexibility to tailor the curriculum to cater for each pupil's individual learning needs.

Key knowledge and skills are regularly revisited allowing repetition to embed understanding. Each class has daily activities that allow pupils to consolidate previous knowledge and retain the skills that they have previously acquired. These activities are embedded alongside daily times tables practise, working on pupils' rapid recall abilities.

Reading is promoted in all maths lessons, subject specific key vocabulary is prominently displayed and explicitly taught to ensure that pupils are able to fully access the maths curriculum. Pupils are also taught to understand the disciplinary literacy of maths. Pupils are taught to;

- Understand and use specialised mathematical terms such as factor, circumference and squared
- Recognise how mathematical language is structured, including the use of symbols (e.g., +, -,) notation, and specific sentence structures.
- Read and interpret mathematical expressions and equations correctly
- Read and understand mathematical problems, word problems, definitions, proofs, and explanations.
- Understand how to decode and interpret mathematical notation, diagrams, charts, and graphs.

Curriculum Intent

Maths Intent						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Green Room Cycle A	Place Value Time Money	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time Money
Green Room Cycle B	Place Value Time Money	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time Money
Blue and Burgundy Room – Cycle A	Place Value Time Money	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time Money
Blue and Burgundy Room – Cycle B	Place Value Time Money	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time Money
Purple, Orange, Yellow, Turquoise – Cycle A	Place Value Time Money (Measurement)	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time Money (Decimals)
Purple, Orange, Yellow, Turquoise – Cycle B	Place Value Time Money (Measurement)	Addition and Subtraction Fractions	Multiplications and Division Shapes	Place Value Measurement	Addition and Subtraction Fractions	Multiplications and Division Time (Decimals)

Assessment and Progress in Maths

At the Forwards Centre we believe that regular assessment is crucial to learning, because it provides both staff and pupils with valuable insights into understanding and progress. It helps identify strengths and areas for improvement, guiding teaching strategies and the personalised support given to our pupils. Additionally, assessments help to ensure that learning objectives are met and that pupils are developing the skills and knowledge necessary for future success.

For every topic in maths, new knowledge and skills that pupils should acquire are set out. During the term teachers use a range of formative and summative assessments to systematically check pupils' understanding and to establish what new knowledge and skills they have acquired. Every term teachers are asked to record any formative or summative assessments against the key knowledge objectives on the Insight system for the units of work that they have delivered.

Each child is assigned personalised learning objectives following a thorough 3–4 week assessment period. During this time, staff carefully evaluate information from the pupil's previous educational setting, complemented by a comprehensive gap analysis. Based on these insights, individual targets are established using the incremental progression framework of the White Rose Maths scheme. This approach provides staff with a precise and detailed understanding of each pupil's current learning stage. In certain instances, pupils may demonstrate a deeper understanding of mathematics than indicated by data from their previous school or the outcomes of our gap analysis activities. This progress can often be attributed to increased confidence, smaller class sizes, and enhanced one-to-one support. In such cases, staff exercise professional judgment to accelerate the pupil's progression, aligning their learning with their true stage and ability level. Progress is measured on an individual basis because of the diverse needs of our pupils.