



Statement of Intent for Maths

Learning Growing Believing Together

“Encourage one another and build each other up”
Thessalonians 5:11

Intent

Why do we teach this? Why do we teach it in the way we do?

***We aim for children to be fluent, flexible, confident and creative mathematicians.
Our approach to primary school mathematics teaching and learning is that it should be about
exploring, reasoning and challenging thinking.***

At Trinity we foster positive can-do attitudes and we promote the fact that ‘We can all do maths!’ We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. At our school, the majority of children will be taught the content from their year group only. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.

We aim for pupils to:

- become **fluent** in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- be able to **solve problems** by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios
- **reason mathematically** by following a line of enquiry and develop and present a justification, argument or proof using mathematical language
- have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to **be successful in mathematics**

The Maths curriculum breadth is adapted to the context of our school by focusing on a progression of knowledge and skills from EYFS to Year 6. The most important subject content is organised through ‘threshold concepts’ which organise new knowledge systematically and ensure a logical progression.

The Mathematical threshold concepts are:

- Number and Place Value
- Addition and Subtraction
- Multiplication and Division
- Fractions, Decimals and Percentages
- Geometry (Shape)
- Geometry (Position, Direction and Movement)
- Measure
- Statistics
- Algebra

Additional Milestones

By the end of KS1

By the end of KS1 all children have developed their number sense to move from counting to calculating.

By the end of Year 4

Children are fluent in their times tables and division facts and can recall them at speed.

Implementation

What do we teach? What does this look like?

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. The progression of learning is based on the White Rose Hub Schemes of Learning Small Steps, where the National Curriculum objectives are met.

The Maths curriculum is sequenced into long- and medium-term plans to help pupils build cumulative knowledge towards expected National Curriculum attainment targets for Maths. Pupils are assessed using mastery tasks from White Rose Hub and reasoning questions as proof of progress in the specific threshold concept.

The curriculum design for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof; assisted in making their thinking clear to themselves as well as others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

Any pupils who have gaps in their skills and knowledge, or any children who are socially disadvantaged, are ensured a rich maths curriculum through our teaching strategies, resources and knowledge of the importance of recall. Teachers model learning through clear explanations and instruction, scaffold tasks so that all children can work at the expected level and identify gaps in learning or misconceptions that children may have before a unit of work.

We recognise that much of the success when performing mathematically is built on the foundations of fundamental knowledge, and we therefore dedicate the beginning of lessons and to recalling previous knowledge. We feel these strategies - for helping children to understand and remember the fundamentals of maths - will help to ensure that the disadvantaged gap in skills and knowledge will be closed.

Coherence

Learning is broken down into small learning aims and steps. Explicitly connecting new ideas to concepts that have already been understood. Very carefully planning the order of learning to facilitate this.

Mathematical Thinking

Students work on ideas to develop deep understanding rather than passively receiving them. Students should be able to reason and discuss. This includes using mathematical terminology and notation as soon as it is relevant.

Fluency

Quick and efficient recall of facts and the ability to use them in different contexts in Mathematics.

Variation

Varying the way a concept is presented to a student and varying practice questions so that mechanical repetition is avoided. Include the use of different methods and misconceptions.

Representation & Structure

Concrete, Pictorial and Abstract. Representations expose students to the mathematical structure so they truly understand why mathematical algorithms work and can therefore adapt to different scenarios.

Assessment

The children will be tracked at three points during the year to monitor attainment and progress.

- Teachers and TAs actively assess daily and provide immediate feedback to move learning forwards.
- End of unit assessments are carried out from the White Rose scheme and supplemented with other activities where needed.
- Our assessment system is updated termly to keep track of pupil attainment.
- NFER assessments are completed in Autumn, Spring and Summer to inform/support our teacher assessment judgements.
- The Maths lead takes part in regular maths pupil voice meetings, regular triangulation of results to assess teacher judgements and reports are presented to governors.
- Book scrutinies are carried out termly by the maths lead and support put in place for any staff who need it in the form of coaching.
- Termly pupil progress meetings are held to discuss pupils and lesson observations in maths by the maths lead are conducted twice a year and support put in place if needed.

Resources

Resources are carefully chosen to support the development of either their fluency, varied fluency, problem solving or reasoning skills.

Lesson Structure

The structure of lessons helps ensure learning is retained and all children are exposed to higher level thinking opportunities. The start of the lesson focuses on a retrieval activity that supports recall and spaced learning. Followed by a problem-solving activity based on previous learning before the new learning for the day is introduced and explored.

Language

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Calculation Policy

The calculation policy maps out the school's consistent approach to methods, resources and vocabulary as they move from EYFS to year 6. It plots the children's journey through the four operations

Interventions

The importance of pre- and post-teaching is considered within mathematical interventions, so that children are familiar with the concepts and vocabulary expected of their age range.

Our SEN team provide specialist support for those children identified as performing considerably below ARE.

Impact

What will this look like? By the time children leave our school they will:

By the end of KS2 we aim for children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.