TOTLEY ALL SAINTS CE PRIMARY SCHOOL

Maths Policy

Subject leader: Tracy Soar

Last reviewed: February 2024

Next review due by: February 2026

THE DIOCESE OF SHEFFIELD ACADEMIES TRUST

Intent

THE TASS COMMUNITY: GROWING AND LEARNING TOGETHER

'At Totley All Saints Church of England Primary School, we aim to be an exceptional school with Christian values at the very heart of the community. We are committed to providing an environment where every child can thrive & is supported to achieve their unique & amazing potential as a child of God.'

"I have come that they may have life, and have it to the full."
John 10:10

Rationale and Aims

At Totley All Saints, we endeavour to equip all of our children with a love of learning and an enquiring mind. We believe that mathematics helps children to make sense of the world around them, by developing their ability to think logically, and to explain and demonstrate knowledge and skills. Through effective maths teaching, we give children the foundations they will need for an ever-changing world, in which an appreciation and understanding of the power of maths is fundamental.

We aim to:

- Develop a positive attitude to maths, and a culture where children and staff enjoy learning.
- Promote mathematical understanding through systematic direct teaching of appropriate learning objectives.
- Develop fluency in number facts and calculations, through regular and varied practice.
- Foster an understanding of the value of maths as a tool in a wide variety of activities.
- Teach mathematical reasoning, where children can follow a line of enquiry, and give examples and explanations to justify their choices.
- Develop problem solving skills, so that children can break problems down into smaller steps, using logical thinking and a systematic approach.
- Encourage resilience and independence, through which children can achieve their goals.
- Enable children to express themselves confidently and fluently using the correct mathematical vocabulary.
- Ensure that children are well equipped with the building blocks needed to continue their learning journey beyond primary school.

Approaches to Teaching Maths

Maths is taught using a Mastery approach, in-line with national curriculum expectations. We want all children to see themselves as mathematicians, who can talk about their learning and explain their thinking, but who also value accuracy. Maths teaching is structured around the Five Big Ideas of:

- Coherence
- Representation and Structure
- Mathematical Thinking
- Fluency
- Variation

The school uses a rich variety of teaching styles to match the different learning styles of pupils, and to ensure that lessons are active and engaging. Maths is taught

through a daily lesson which includes whole-class and group direct teaching, as well as an additional 'Number Club' session, focussing on fact fluency and arithmetical procedure. Short term planning

Our lessons follow the Teach Simply model of review, teach, practise, apply. Learning objectives for each session are shared with the class n so that pupils can assess whether they have been successful. Short term planning breaks down the White Rose sequence further, and provides further detail. Where smaller steps are required, teachers refer to the NCETM spines. All children are given tasks to develop their fluency, reasoning and problem-solving skills at points throughout the lesson, using the teach-task format. This helps to keep the pace of the lesson sharp as well as ensure that all pupils are supported throughout. Resources such as ISEE Reasoning and the NCETM mastery materials are used to ensure that even the most able pupils are given opportunities to be challenged.

The school calculation policy is followed by all staff, referring to different year groups to support or extend as needed.

Lessons are talk rich and children are taught and expected to use the correct vocabulary. Stem sentences are used to encourage the use of this vocabulary and to support children to structure their discussions with talk partners using the think-pair-share format. Concrete materials are an integral part of maths teaching and learning. They are readily available in all parts of all lessons and to all children, and are clearly labelled and accessible. Visualisers can be used by teachers during the teach part of the lesson, to demonstrate to pupils how the manipulatives can support their learning.

TAs and other adults in class are used in a variety of ways to support pupils learning. This could be:

- To provide a pre teach for specific pupils
- Rapid intervention
- To recap a teach part for pupils who need further support
- To support independent learning while the teacher supports those who need further support
- To live mark and identify pupils who need challenge/ further support

Resources and Environment

All classes use the White Rose Scheme of Learning to structure their planning. Additional resources are used to supplement this scheme. A wide range of manipulatives is available in classrooms, to support teaching and learning using the Concrete-Pictorial-Abstract approach. This is detailed further in our school calculation policy. Key vocabulary, stem sentences and worked examples are displayed on each classroom's working wall for each unit of learning, as well as a 100 square and number line.

Assessment

Assessment is a continuous process, to monitor and evaluate the impact of teaching and learning. Teachers make assessments of pupils daily through:

- regular marking and high-quality feedback
- analysing errors and picking up on misconceptions
- asking questions and listening to answers
- facilitating and listening to discussions
- making observations

This ongoing formative assessment is used to structure daily planning. Lessons are adapted to address misconceptions and give additional support/consolidation/ challenge as appropriate. Where needed, time for rapid intervention is allocated within the existing timetable. This is prior to the next lesson wherever possible, to ensure that pupils have received support and no gap is formed. Teachers may use the White Rose end of unit assessments and NCTEM guidance to help them assess pupils effectively. Materials are also provided as part of our Number Sense Fluency scheme.

Pupils from Y1-5 are assessed termly using Rising Stars tests, while pupils in Year 6 follow a programme of pasts SATs test to track progress. This summative assessment is logged on Insight and/or SmartGrade. Where gaps have formed and a longer intervention is required, this is discussed in Pupil Progress meetings, and a programme of support mapped out.

Pupils with SEND

Pupils identified on the SEND register are assessed against National Curriculum Age related expectations. Where applicable, pupil's support plans incorporate suitable objectives from the National Curriculum and White Rose Maths and teachers use these objectives when planning work. The Birmingham Toolkit is used where appropriate, as well as involvement from outside agencies, to enable all pupils to reach their full potential. Intervention programmes to fill in any gaps in understanding are an integral part of our maths curriculum for all children.

Communication with Parents and Carers

Parents and carers are kept regularly updated with their child's progress at our termly meetings. Pupils receive regular maths homework from Year 2 upwards; based around number facts and arithmetical fluency. This is supplemented with Number Sense materials. White Rose One Minute Maths and the Times Tables RockStars app. Parents are invited to regular workshops to keep them updated with key strategies used in school, and to provide them with the skills and tools they need to support their child at home. This ensures a consistency of approach both in and out of school. For those who are unable to attend, resources are shared through Class Dojo. This platform is also used by class teachers as a way of sharing children's maths learning with home.

Arrangements for monitoring standards of teaching and learning in Maths

The maths subject lead, as part of the Senior Leadership Team, monitors maths within the school, through the analysis of assessment data, drop-in lesson observations, work sampling and pupil interviews. This information feeds into the school's self-evaluation process, to ensure that maths continues to develop and adapt where appropriate.