



Trinity and St. Michael's

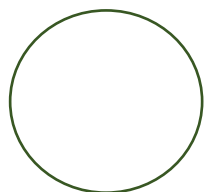
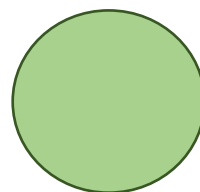
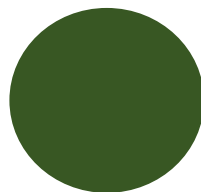
Maths Policy

"Don't withhold good from someone who deserves it, when it is in your power to do so."
Proverbs 3 Verse 27

Do everything in



1 Corinthians 16:13-14





The Nature of Mathematics

This policy reflects the school values and philosophy in relation to the teaching and learning of mathematics.

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore.

1 - Intent

Using the Programmes of Study from the National Curriculum and the White Rose Mathematics Scheme of Work we aim to develop:

- *a positive attitude towards mathematics and an awareness of the fascination of mathematics*
- *competence and confidence in mathematical knowledge, concepts and skills*
- *an ability to solve problems, to reason, to think logically and to work systematically and accurately.*
- *initiative and an ability to work both independently and in cooperation with others*
- *an ability to communicate mathematics*
- *an ability to use and apply mathematics across the curriculum and in real life*
- *a solid foundation in the 'Key Skills' of Mathematics*
- *an understanding of mathematics through a process of enquiry and experiment*

2 – School Policy and the National Curriculum

Within KS1 and KS2 teachers will follow the national curriculum, aiming learning at the needs of the children in their class with the option of using the White Rose Maths Framework. At the start of each term, teachers are asked to produce a long term plan that which states a week by week breakdown of what end points they expect to meet.

Through careful planning and preparation, we aim to ensure that throughout the school children are given the opportunity for:

- the development of mental and oral skills in calculations
- practical activities and mathematical games
- problem solving
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculation, e.g. mental, pencil and paper and using a calculator
- working with ICT as a mathematical tool



3 – Scheme of Work

Teachers may use the White Rose Maths planning document and scheme of work but we encourage teaching staff to use any planning document as a working document. We encourage all in-depth plans to be produced on a week-by-week basis with children's prior learning and ability taken into consideration.

We have agreed procedures for teaching addition, subtraction, multiplication and division. (See our Visual Calculation Policy).

4 – Cross-Curricular Work

At Trinity and St Michael's, we ensure opportunities exist to extend and promote mathematics throughout the curriculum. It is expected that teachers seek out opportunities to think mathematically in all areas of the curriculum. Mathematics contributes to many subjects within the primary curriculum and opportunities are sought to draw mathematical experience out of a wide range of situations and in particular apply mathematics to real life contexts.

5 – Teachers' Planning and Organisation

Each class teacher is responsible for the mathematics in their class in consultation with and with guidance from the mathematics coordinator.

Mathematics is taught in single age year groups.

The approach to the teaching of mathematics at Trinity St Michael's is based on the following key principles:

- ***children explore mathematics every day***
- ***a clear focus on direct, instructional teaching and interactive oral work with the whole class and group***
- ***a regular reminder of Key Skills, with KS2 taking key skills papers weekly***
- ***clear learning objectives visible steps to success***
- ***activities well matched to the learning objectives***
- ***activities to incorporate oral discussion, group work, problem solving opportunities, practical opportunities and independent work***
- ***Teachers are asked to produce a long term plan, outlining the basic structure of the children's learning, at the start of each term***



6 – Special Educational Needs

Children with SEN are taught within the daily mathematics lesson and are encouraged to take part when and where possible (please see the section on differentiation).

Where applicable children's IEPs incorporate suitable objectives from the termly planning document and teachers consider children's targets to their plans and monitor how well their needs are being met.

When additional support staff support groups or individual children they work collaboratively with the class teacher. Support is targeted on an ongoing basis based on basic skills and informed by data gathered during Key Skills sessions and NFER assessments.

Within the daily mathematics lesson teachers not only provide activities to support children who find mathematics difficult but also activities that provide appropriate challenges for children who are high achievers in mathematics.

7 – Equal Opportunities

All pupils irrespective of age, gender, religion or race are given the same learning opportunities. Where appropriate teachers should seek to take advantage of multi-cultural aspects in mathematics.

8 – Pupils' Records of Their Work

There are occasions when it is both quick and convenient to carry out written calculations. It is also important to record aspects of mathematical investigations. Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient method of recording. We encourage 2 recorded pieces of work in books per week with other activities being displayed on Blippit, and / or social media.

Children are encouraged to use mental strategies before resorting to a written algorithm.

8a - Exercise Books for Recording

It is school policy that the following pattern is used:

- | | | |
|----|-----------|---|
| 1. | Reception | <i>plain exercise books</i> |
| 2. | Year 1: | <i>plain exercise books moving to 2cm squared paper</i> |
| 3. | Year 2: | <i>2cm squared paper moving to 1cm squared paper</i> |
| 4. | Year 3: | <i>1 cm squares moving to 8 mm squares</i> |
| 5. | Year 4: | <i>8 mm squares</i> |
| 6. | Year 5: | <i>8 mm squares</i> |
| 7. | Year 6: | <i>8 mm squares</i> |

Children are given guidance on the presentation of their written work in their mathematic books.



8b – Agreed Presentation in Maths Books

- Date underlined and Learning objective to be underlined
- Year 6, 5, 4 and 3 write the objective of the lesson
- Year 2 write a title for the piece of work (this may be a learning objective)
- Year 1, the teacher will provide the learning objective or comment on the subject matter, e.g. adding numbers to 10
- Ensure the children use the lines to write on, with fractions written using two lines
- Children will write one digit per box.

9 – Feedback

The quality of feedback is crucial. We have agreed procedures for marking and feedback. (See the Marking and Feedback Policy).

10 – Assessment and Record Keeping

At Trinity and St Michael's we believe in a rigorous and fair summative assessment system. The Mathematics lead and assessment lead work together to organise a termly assessment week. Within the assessment week, all children throughout the school will sit the appropriate NFER assessment papers. Within Key Stage 2, teachers will swap classrooms during mathematics assessments to ensure a fair and consistent approach is being obtained. Within Key Stage 1 the Key Stage lead will set out an appropriate plan to ensure children are comfortable but standards are still being met.

The Mathematics lead and Assessment lead will work together to ensure staff or support staff are given the appropriate time to mark and input all data onto the NFER assessment hub.

Formative Assessments are done through:

- Observation
- Questioning strategies used by children and their understanding
- Inviting children to explain their method
- Marking and feedback
- Informal quizzes and tests – oral or written
- Key skills assessments

Summative Assessment Cycle

Year 1 – Spr & Sum NFER Assessment

Year 2 – Aut & Spr NFER Assessment. Sum, SATs

Year 3 – Aut, Spr & Sum NFER Assessment

Year 4 – Aut, Spr & Sum NFER Assessment

Year 5 – Aut, Spr & Sum NFER Assessment

Year 6 – Aut & Spr NFER Assessment. Sum, SATs



Long term assessment

A child's attainment is given to parents at the end of each year to state where they lie within their year group's expectations.

Made at the end of each year using NFER results and comparing a child's learning against national standards and the school's end points.

It is important to note that children's performance in their formative assessments is taken into consideration when noting their attainment at the end of the year. However, teachers (following appropriate discussions with a Senior Leader) have the authority to overrule these results if they feel they are truly not reflective of a pupil's attainment.

11 – Reporting to Parents

Reporting to parents is intended to give a clear and helpful picture of pupils' progress. The Home-School diary provides a useful tool to communicate information to parents on a regular basis. A written report for parents summarising the information can be found in the Year Record.

Parents of all pupils in Key Stages 1 and 2 receive a written report each year in the Summer Term. This report complies with the statutory requirements and provides parents with information regarding academic achievement in each subject, progress in school and other skills and abilities. The reports are completed by the class teachers and signed by the headteacher. All reports are held on the T-Drive.

Parents are invited to attend a 'Meet the Teacher Evening' in the Autumn Term to discuss the class's expectations. During this meeting, the class teacher will share extra resources, websites and applications that children can access at home.

Parents of all Year 2 and Year 6 pupils receive the result of Statutory SATs and have the opportunity to discuss those with the class teacher. This is in accordance with our Policy document concerning Assessment, Recording and Reporting.

12 – Parental Involvement

- Parents of Reception children are invited to an evening in the Autumn Term to inform them about the teaching of Mathematics.
- Parents are invited into school annually to look at, and discuss, their children's work.
- Parents are invited to attend a 'Meet the Teacher Evening' in the Autumn Term to discuss the class's expectations. During this meeting, the class teacher will share extra Maths resources, websites and applications that children can access at home.
- Parents of Year 3 children are invited to an evening in the Autumn Term to inform them about the teaching of Mathematics
- A Maths Open Evening for the new Reception class is held once a year.
- Parents are sent information via the class curriculum letter (this is also available via website)
- Login detail for Maths programmes used in school will be distributed by the class teacher.



13 – Differentiation

Differentiation should always be incorporated into all mathematics lessons and can be done in various ways:

Graded Activities which become more difficult and demanding but cater for the less able in the early sections.

Common Tasks which are open ended activities/investigations where differentiation is by outcome.

Resourcing and Scaffolding which provides a variety of resources depending on abilities eg. counters, cubes, 100 squares, number lines, mirrors.

Grouping according to ability so that the groups can be given different tasks when appropriate. Activities are based on the same theme and usually at no more than three levels.

Support from Teacher / Teaching Assistant.

14 – Monitoring and Evaluation

Mathematics is monitored by the Subject Leader and Headteacher. through:

- Lesson observations
- Scrutiny of pupils' books
- Analysis of teachers' plans
- Talking to children
- Termly Excel Data documents to be updated by class teacher, Maths Lead and Assessment Lead.

The Maths Lead will conduct a regular observation / drop in or book scrutiny. Feedback will be offered after the lesson observation.

Issues arising from the monitoring procedure are discussed at Senior Leadership Meeting and at staff meetings. Regular INSET gives opportunities to review the scheme, policy, published materials, resources and targets.

15 – Staffing and Resources

Staff needs are identified through a variety of means. These may be as a result of Performance Management meetings, school development planning, a curriculum review or lesson observation. These are then prioritised by the senior management team. Individual needs are considered as part of the School Development Plan.

Subject Leader, Headteacher and other members of SLT run INSET workshops for curriculum development of the staff.



15a – Role of the Subject Leader

- Regularly evaluate Maths through deep dives.
- Lead the collaborative development of a curriculum policy and scheme of work which addresses planning, differentiation, progression and both formative and summative assessment as well as the appropriate teaching styles
- Evaluate the school's resources and maintain these effectively and plan for future investment in negotiation with colleagues.
- Offer advice and support to colleagues both as a consultant and within the classroom
- Keep abreast of new developments or changes in legislation and content and inform colleagues appropriately.
- Monitor and renew the implementation of the curriculum area to ensure coverage of programmes of study across the key stages.

15b – Resources

Practical mathematical equipment is accessible to all staff and is stored centrally in the main corridor between KS1 and KS2. All classrooms to have a box of day-to-day resources, e.g. number lines, 100 squares, beads, dice, counters etc readily accessible in their own classrooms.

16 – The Governing Body

The current Mathematics Governor is Mrs Hannah Humphris. The Mathematics Governor is invited to attend relevant school INSET and liaises with the subject leader regularly. The Mathematics Governor is kept well informed of the school's priorities through personal contact and through her involvement with the Curriculum Committee.

17 – Homework

It is our school policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief but are valuable in promoting children's learning in mathematics.

Children are expected to practise number bond work and multiplication tables regularly. This can be done through a range of methods including online games and written work.

It is expected that children complete one compulsory piece of homework a week. If a teacher does not give a piece of Maths homework it is expected that optional tasks are available and these can be distributed through home-school diary messages, curriculum letters, emails etc.



18 – EYFS

In EYFS, we follow the Early Years Statutory Framework. Teachers ensure the children learn through a mixture of adult led activities, child-initiated activities and small group work both inside and outside of the classroom. Mathematics is taught through an integrated approach using material from Development Matters and White Rose Maths.

The children have a wide range of structured play resources available to them throughout the year - this is known as "continuous provision". The adults model the use of these resources and the appropriate mathematical language as they support the children in their play.

Evidence of Mathematics sessions, whether it's child led or adult led, should be kept on Tapestry and each child should have their own Learning Journal which keeps any paper based evidence. The EYFS teaching team keep a log of all formative and summative data which should be overseen by the EYFS lead.

Reviewed by: J Hawman

Next policy review March 2024