

Holy Trinity C of E Primary School

‘**A Church School community aspiring for all to live life to the full’**

Mathematics Policy

**Approved by Governors: Spring 2020**

**Reviewed: Spring 2022**

# GENERIC PRINCIPLES

## 

## Equalities

We are committed to delivering the content of this policy to meet the needs of all staff, pupils and other stakeholders where relevant, irrespective of race, gender and disability.

## Safeguarding

Our school recognises and promotes the responsibilities of all adults in protecting pupils. Specific responsibilities involved in ensuring child protection and wider safeguarding procedures are in place and must be adhered to: please refer to Child Protection & Procedures Policy; ‘Keeping Children Safe in Education’ (2018) and ‘Working Together to Safeguard Children’ (2018.)

## Cross-Referencing

This policy should be read in conjunction with these other related policies and documents:

* Bullying Policy
* Behaviour/relationships policy
* PSCE & SRE Policy
* Curriculum policy
* Admission policy
* Feedback and marking policy

## Vision

This vision for our school: ***A church school community aspiring for all to live life to the full***

### Community

Where community means all those directly (ie children, staff, parents and governors) and indirectly (eg local schools and organisations) involved with the school.

### Aspiring

Where aspiring means wanting the best for our children and families and supporting them to develop the necessary knowledge, skills and understanding to be their best.

### Life to the full

Where ‘life to the full’ means providing a broad range of experiences and opportunities to apply the knowledge, skills and understanding we have to be able to participate in life and not be passive observers of it

Mathematics Policy

*‘Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.’*

*(National Curriculum, 2014)*

# Aims

The national curriculum for mathematics aims to ensure that all pupils:

* become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
* **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
* can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

# Organisation of the teaching and learning

## Foundation Stage

### Early Years Foundation Stage

It is widely appreciated that a child’s mathematical understanding is greatly influenced during their early years of life. At Holy Trinity, we strive to ensure that children’s first experiences of mathematics within school are both positive and practical. During these early years, children are given opportunities to explore the number system, develop mathematical vocabulary through exploration and imitation, learn to represent groups and numbers, and develop early reasoning skills.

Children work towards the following Early Learning Goals:

**EGL: Number**

Children at the expected level of development will: -

Have a deep understanding of number to 10, including the composition of each number;

- Subitise (recognise quantities without counting) up to 5;

- Automatically recall (without reference to rhymes, counting or other aids) number bonds up

to 5 (including subtraction facts) and some number bonds to 10, including double facts.

**ELG: Numerical Patterns**

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;

- Compare quantities up to 10 in different contexts, recognising when one quantity is greater

than, less than or the same as the other quantity;

- Explore and represent patterns within numbers up to 10, including evens and odds, double

facts and how quantities can be distributed equally.

## Key Stage 1 and 2

Maths is taught daily as a discrete subject and the programmes of study from the 2014 Curriculum. The school uses the a variety of resources to support the planning and teaching, to ensure the learning is led by the children.

## Planning

At Holy Trinity Primary, children are taught the Mathematics curriculum (outlined by the programmes of study) through the direction of our schools scheme of work (Appendix 1). Our school teaches the children using the ‘Mastery’ approach (Appendix 2) which enhances the learning experiences of children and ensures that they are all accessing tasks that are of a challenging level. Our mathematics curriculum is organised on a year-to-year basis as set out by the National Curriculum. Each NC objective is then broken down and taught in small steps, sequentially to ensure that children develop a rich conceptual understanding.

## THE MARKING OF MATHEMATICS WORK

Children’s work is marked according to the school's agreed marking policy.

## CALCULATORS

Calculators will not be used as a substitute for good written and mental arithmetic. They will therefore only be introduced in KS2 to support pupils’ conceptual understanding and exploration of more complex number problems if written and mental arithmetic are secure.

## ASSESSMENT

Assessment is regarded as an integral part of learning and teaching and is a continuous process. We do both informal and formal assessment to inform our teaching.

### Foundation Stage

* Transfer records from pre-school settings indicate progress using the Foundation Stage Curriculum Guidance. This is used in partnership with Reception Class practitioner’s ongoing observational assessments made early in Autumn, Term 1 to ascertain a baseline which then informs subsequent teaching and learning for each child.
* Future attainment is noted using photographs and observational notes. Progress is recorded in each child’s Learning Journey and the next steps to be taken are identified.
* Separate records for understanding ‘numbers for labels and counting’ are also kept; progress is monitored termly.
* Statutory assessments are made on entry, mid-term and on exit of the Foundation Stage

### KS1 and KS2

* In the daily mathematics lesson, formative assessments are made on a day-to-day basis, activity records are used to document individual progress and the short-term plans annotated. Practitioners observe, question and evaluate lesson outcomes further to determine progress made and the next steps in learning.
* Summative assessments are made during the term to monitor children’s knowledge and understanding of concepts taught. Commercial resources are also used to support the assessment process.
* Statutory assessments are made at the end of each key stage.

## Recording

3 times a year (end of each full term), teachers record children’s progress and attainment in Maths using Target Tracker. This information is used, by class teachers and the SLT, to monitor children’s progress and attainment.

In addition, teachers complete Pupil Progress data sheets, which focus not only on their cohort but on named Vulnerable Groups.

These two forms of data are used by teachers and SLT at Pupil Progress meetings (3 x yearly), with action plans being drawn up to address specific issues.

## MONITORING AND EVALUATION

Teaching staff monitor their pupils through observation, discussion, teacher assessment, marking work and testing.

The teaching of mathematics is monitored through:

* learning walks
* lesson observations
* pupil conferencing
* book looks
* discussion during staff meetings and INSET
* Pupil progress meetings.

The Headteachers, SLT and subject leader are responsible for monitoring progress in mathematics.

## INCLUSION

All children have equal access to the mathematics curriculum. Our school strives to meet the needs of pupils with special educational needs, with disabilities, those who are gifted and talented and those learning English as an additional language. Further guidance can be found in the school’s Inclusion Policy.

## HEALTH AND SAFETY

Children are made aware of their responsibility regarding safe and sensible use of equipment. All equipment used is of a suitable nature e.g. no glass jars for capacity work. Any potentially harmful equipment, such as compasses, are stored away safely. A risk assessment is carried out prior to children participating in a mathematical activity outside the school grounds.

## GOVERNING BODY

The Subject leader will encourage positive links with the Maths governor to keep the governing body informed of all major issues related to mathematics in the school. During Strategy and Standards meetings the Subject leader will present to governors when necessary and inform them of developments and progress of mathematics at our school.

The Maths governor will make a subject visit each year to gain a better understand the teaching and assessment of maths within the school.

## INFORMING PARENTS

The Maths calculation policy and ‘What Maths looks like at Holy Trinity’ document can be found on our school website to help parents support their children at home.

During parents evening in February the parents are informed of their child’s progress in maths from the class teacher. In addition the parents of Reception children have regular involvement and interaction of their children’s progress through the ‘tapestry’ programme.

## CROSS-CURRICULAR LINKS

The teaching of mathematics contributes significantly to children’s understanding of other curriculum areas. Links are planned and taught appropriately.

## Home/school partnership

The children are given regular maths homework. This work is related to the learning completed in class.

# Resources

* Commercial resources to support the teaching and learning of mathematics, eg. kangaroo maths, NCETM website, White Rose and GLOW maths hub, CanDoMaths and Maths No problem.
* Games
* Central resource / equipment cupboard (Resource room – GTR2)
* Working and learning walls
* Interactive displays
* Different environments ~ classrooms, outdoor learning spaces, hall, nature area and surrounding environment.
* A range ICT software to support the teaching of specific concepts

**Evaluation Review:**

**Agreed:**

**Review Date:**