



Mathematics Policy **February 2021**

At Christ Church C of E Primary School we believe 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; tackling a range of practical tasks and real life problems.

The Aims of the National Curriculum

The National Curriculum for Mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- 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

Through the teaching of mathematics we aim to: -

- promote high standards of mathematical achievement for all pupils
- elevate the status of mathematics as a core subject; fostering the enthusiasm and enjoyment of mathematical learning
- equip children with the skills required to approach numerical problems in everyday life with proficiency and confidence
- cultivate an awareness of the connection between mathematical concepts; relating them to real life situations whenever possible
- develop a wide base of mental calculation strategies alongside the rapid recall of known numerical facts
- provide an interesting and stimulating environment, which encourage the development of the essential skills of investigation, reasoning, computation, calculation, classifying and problem solving
- create opportunities for children to represent and structure their ideas using a wide variety of recording methods - from formal written procedures to more informal jottings
- encourage the use and select appropriate mathematical manipulatives and resources in order to solve problems

Teaching and learning

1. Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape, Space and Measure) provide the long-term planning for mathematics taught in school.

2. Medium term planning

Years 1-6 use a range of materials to supplement the National Curriculum objectives including White Rose Maths resources and NCETM Spine materials. These resources provide teachers with an exemplification for maths objectives and are broken down to support a CPA approach (concrete, pictorial and abstract) and mastery approaches to mathematics. The idea of depth before breadth is supported by these resources, and support children working both individually and in a whole group situation.

3. Short term planning/lessons

- The above resources support daily lesson planning. All classes have a daily mathematics lesson where possible, in addition to dedicated time devoted to the practice of basic skills.
- The emphasis in lessons is to engage all children encouraging them to talk about maths. Lessons have plenty of opportunities for explaining, illustrating applying, reflecting and summarising.
- Every other Friday, classes participate in 'Mega Maths' where the full morning is spent engaging in stand alone exciting maths activities, whether it is revisiting prior learning or introducing a new concept.
- In all year groups opportunities are frequently sought to undertake investigations, use hands on math skills and to experience 'real world' maths. Lessons are based on developing the fluency of core mathematical skills, then applying these skills in a problem solving situation.

4. Marking/assessment

Work is marked in line with the school policy. Children, where possible, are encouraged to self-mark to ensure instant feedback. Misconceptions are revisited at the start of the next lesson. Assessment is integral and is a continuous process. Teachers use formative assessment through working with children and analysing errors and misconceptions to inform future planning and teaching. Termly assessments are carried out across school which together with judgements from class work help teachers in making accurate assessments for each child. Pupil progress meetings are scheduled each term to identify any appropriate interventions required.

5. ICT

Many online programmes are used to support pupil progress in maths including TTRockstars, Numbots, Purple Mash and Mymaths. Children are encouraged to access these programmes from home. In addition, classes receive dedicated time in the computer suite to utilise these programmes.

Special Educational Needs and Disabilities (SEND)

Daily maths lessons are inclusive to pupils with special educational needs and disabilities. Where required, children's support plans incorporate suitable objectives and teachers are mindful when planning work. Teachers have a responsibility to not only provide scaffolded activities to support children with SEND, but also activities that provide ample challenge for greater depth children. All children are challenged to a level appropriate to their ability.

Interventions

Interventions take place throughout school to support the learning of certain groups and individuals.

- Specific programmes such as Success@Arithmetic and First Class@Number

- Consolidation of core skills through small group work throughout school
- Individual support

The Subject Leader

The subject leader works in conjunction with and is a member of the SLT. The role involves:-

- Modelling good practice
- Keeping informed about developments and new initiatives to support the teaching of math and to ensure all staff are kept informed
- Auditing needs and organising staff training
- Training staff in the teaching and learning of Numeracy and sharing practice during staff training and staff meetings
- Monitoring planning on a half-termly basis with the head teacher
- Monitoring the content of books: progression, curriculum coverage and challenge of all abilities
- Supporting teachers in planning and using resources
- Periodically updating this policy in line with current changes and practice

The role of the governing body

Regular reports are made to governors on the progress of Math provision via our Numeracy Governor. The numeracy governor makes regular visits to the school to facilitate the report making process and ensure this policy is understood and followed.

Emma Wake

Maths Subject Lead 2021