## ST PETER'S CATHOLIC PRIMARY SCHOOL



# **Mathematics Policy**

# **MISSION STATEMENT**

Learning Together, Loving God, Becoming the best I can.

Last reviewed: February 2023

#### **Contents:**

#### Statement of intent

- 1. <u>Legal framework</u>
- 2. Roles and responsibilities
- 3. Early years provision
- 4. <u>Cross-curricular links</u>
- 5. Teaching and learning
- 6. Planning
- 7. Assessment and reporting
- 8. Resources
- 9. <u>Equal opportunities</u>
- 10. Monitoring and review

#### Statement of intent

St. Peter's Catholic Primary School recognises that mathematics is both a key skill within school, and a life skill given by God, to be utilised through everyday experiences. A high-quality maths education provides a firm foundation for understanding how maths is used in everyday life and activities, developing pupils' ability to reason mathematically and make links with the needs and solidarity of others in the world around us.

Through the teaching of maths, we aim to develop:

- A positive attitude towards maths and an awareness of the relevance of maths in the real world.
- A process of enquiry and experiment.
- An ability to solve problems, reason and think logically in order to work systematically and accurately.
- An ability to work both independently and in cooperation with others.
- Competence and confidence in pupils' maths knowledge, concepts and skills.
- An appreciation of the creative aspects of maths and an awareness of its aesthetic appeal.

To support the curriculum and express our faith as followers of Christ, we apply our maths skills and knowledge to develop awareness of vocations, charitable outreach and the needs of others through:

NSPCC Macmillan Father Hudson's House point system (St Peter's Shop) Job Focus Day

#### 1. Legal framework

- **1.1.** This policy has due regard to statutory guidance including, but not limited to, the following:
  - DfE (2021) 'National curriculum in England: Mathematics programmes of study'
  - DfE (2021) 'Statutory framework for the early years foundation stage'

### 2. Roles and responsibilities

- **2.1.** Maths coordinator is responsible for:
  - Preparing policy documents, curriculum plans and schemes of work for the subject.
  - Reviewing changes to the national curriculum and advising on their implementation.
  - Monitoring the learning and teaching of maths, providing support for staff where necessary.
  - Ensuring the continuity and progression from year group to year group.
  - Encouraging staff to provide effective learning opportunities for pupils.
  - Helping to develop colleagues' expertise in the subject.
  - Organising the deployment of resources and carrying out an annual audit of all maths-related resources.
  - Liaising with teachers across all phases.
  - Communicating developments in the subject to all teaching staff.
  - Leading staff meetings and providing staff members with the appropriate training.
  - ensuring common standards are met for recording and assessing pupil performance.
  - Collating assessment data and setting new priorities for the development of maths in subsequent years.

- **2.2.** The classroom teacher is responsible for:
  - Acting in accordance with this policy.
  - Ensuring progression of pupils' mathematical skills, with due regard to the national curriculum.
  - Planning lessons effectively, ensuring a range of teaching methods are used to cover the content of the national curriculum.
  - Liaising with the Maths Coordinator about key topics, resources and support for individual pupils.
  - Monitoring the progress of pupils in their class and reporting this on a termly basis to parents.
  - Reporting any concerns regarding the teaching of the subject to Maths coordinator or a member of the senior leadership team (SLT).
  - Undertaking any training that is necessary in order to effectively teach the subject.

#### **2.3. SENDCO coordinator** is responsible for:

- Liaising with the subject leader in order to implement and develop maths throughout the school.
- Organising and providing training for staff regarding the maths curriculum for pupils with special educational needs and disabilities (SEND).
- Advising staff how best to support pupils' needs.
- Advising staff on the inclusion of mathematical objectives in pupils' individual education plans.
- Advising staff on the use of teaching assistants in order to meet pupils' needs.

## 3. Early years provision

- 3.1. Activities and experiences for pupils will be based on the seven areas of learning and development, as outlined in the DfE's 'Statutory framework for the early years' foundation stage'
- **3.2.** Activities will provide pupils with the opportunity to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems, and describing shapes, spaces and measurements.
- **3.3.** All activities will adhere to the objectives set out in the framework.

#### **4.** Cross-curricular links

**4.1.** Wherever possible, the maths curriculum will provide opportunities to establish links with other curriculum areas.

#### 5. Teaching and learning

- **5.1.** Pupils will be taught to describe key characteristics and associated processes in common language, as well as understand and use technical terminology and specialist vocabulary.
- **5.2.** Pupils will undertake independent work, and have the opportunity to work in groups and discuss work with fellow classmates.
- **5.3.** Lessons will allow for a wide range of mathematical, enquiry-based research activities, including the following:
  - Questioning, predicting and interpreting
  - Pattern seeking
  - Collaborative work
  - Problem-solving activities
  - Classifying and grouping
- **5.4.** Lessons will involve the use of a variety of sources, including data, statistics, graphs and charts.
- 5.5. The classroom teacher, in collaboration with the Maths coordinator, will ensure that the needs of all pupils are met by:
  - Setting tasks which can have a variety of responses.
  - Teachers adopt strategies to ensure all children access the whole curriculum.
  - Utilising teaching assistants to ensure that pupils are effectively supported.
- 5.6. A maths mastery approach is taken to the curriculum, in which fluency comes from deep knowledge and practice. This means that structured questioning is used to ensure that pupils develop fluent technical proficiency and think deeply about the underpinning mathematical concepts.
- **5.7.** Focus is put on the development of deep structural knowledge and the ability to make connections, with the aim of ensuring that what is learnt is sustained over time.
- **5.8.** At St. Peter's Catholic Primary School, we do not prioritise between technical proficiency and conceptual understanding, and we aim to develop these in parallel.

#### 6. Planning

- **6.1.** All relevant staff members are briefed on the school's planning procedures as part of their staff training.
- **6.2.** Throughout St. Peter's Catholic Primary School, maths is taught as a discrete lesson and as part of cross-curricular themes when appropriate.
- **6.3.** Teachers will use the key learning content in the DfE's statutory guidance 'National curriculum in England: mathematics programmes of study', published in 2021
- **6.4.** Lesson plans will demonstrate a balance of interactive and independent elements used in teaching, ensuring that all pupils engage with their learning.
- **6.5.** There will be a clear focus on direct, instructional teaching and interactive oral work with the whole class and targeted groups.
- **6.6.** Teachers will ensure that all maths lessons include a focus on mental calculation.
- **6.7.** Long-term planning will be used to outline the units to be taught within each year group. (White Rose overview)
- **6.8.** Medium-term planning will be used to outline the vocabulary and skills that will be taught in each unit of work, as well as highlight the opportunities for assessment.
- **6.9.** Medium-term plans will identify learning objectives and main learning activities.
- **6.10.** Short-term planning will be used flexibly to reflect the objectives of the lesson, maths vocabulary for the lesson, skills to be taught with teaching aims and reasoning.
- 6.11. Short-term planning is the responsibility of the teacher. This is achieved by building on their medium-term planning, taking into account pupils' needs and identifying the method in which topics could be taught.
- 6.12. All lessons will have clear learning objectives, which are shared and reviewed with pupils
- 6.13. Homework will be set on a weekly basis. TT Rockstars is used to support pupils learning and recall of multiplication and division facts. Y6 use IXL. Parents introduced to White Rose 1 minute maths (May 2022)

## 7. Assessment and reporting

**7.1.** Pupils will be assessed and their progression recorded in line with the school's Assessment Policy.

- 7.2. Pupils aged between two and three will be assessed in accordance with the 'Statutory framework for the early years' foundation stage' Goals, in order to identify a pupil's strengths and identify areas where progress is less than expected.
- **7.3.** An EYFS Profile will be completed for each pupil in the final term of the year in which they reach age five.
- 7.4. The progress and development of pupils within the EYFS is assessed against the early learning goals outlined in the 'Statutory framework for the early years' foundation stage'.
- **7.5.** Throughout the year, teachers will plan on-going creative assessment opportunities in order to gauge whether pupils have achieved the key learning objectives.
- 7.6. Assessment will be undertaken in various forms, including the following:
  - Talking to pupils and asking questions
  - Digital observations taken and shared with parents weekly via evidence me app
  - Discussing pupils' work with them
  - Marking work against the learning objectives
  - Pupils' self-evaluation of their work
  - Classroom tests and formal exams
- 7.7. Formative assessment, which is carried out informally throughout the year, enables teachers to identify pupils' understanding of subjects and inform their immediate lesson planning.
- 7.8. In terms of summative assessments, the results of end-of-year assessments will be passed to relevant members of staff, such as the pupil's future teacher, in order to demonstrate where pupils are at a given point in time.
- 7.9. Standardised tests will be used three times a year, towards the end of each academic term, to measure each pupil's attainment in all areas of maths. These results will be compared with an 'average' for all pupils of that age.
- **7.10.** Parents will be provided with a written report about their child's progress during the summer term every year.
- **7.11.** Verbal reports will be provided at parent-teacher meetings during the Autumn and Spring terms.
- **7.12.** The progress of pupils with SEND will be monitored by SENDCO coordinator.

#### 8. Resources

- **8.1. Maths coordinator** is responsible for the management and maintenance of maths resources, as well as for liaising in order to purchase further resources.
- **8.2.** Maths resources will be stored in each classroom,
- **8.3.** Display walls will be utilised and updated regularly.
- **8.4.** Maths equipment and resources will be easily accessible to pupils during lessons.
- **8.5. Maths coordinator** will undertake an audit of maths equipment and resources on an annual basis.

#### **9.** Equal opportunities

- 9.1. All pupils will have equal access to the maths curriculum.
- **9.2.** Gender, learning ability, physical ability, ethnicity, linguistic ability and/or cultural circumstances will not impede pupils from accessing all maths lessons.
- **9.3.** Where it is inappropriate for a pupil to participate in a lesson because of reasons related to any of the factors outlined above, the lessons will be adapted to meet the pupil's needs and alternative arrangements involving extra support will be provided where necessary.
- **9.4.** All efforts will be made to ensure that cultural and gender differences will be positively reflected in all lessons and teaching materials used.

## 10. Monitoring and review

- 10.1. This policy will be reviewed every three years by Maths coordinator.
- **10.2. Maths coordinator** will monitor teaching and learning in the subject at St. Peter's Catholic Primary School.
- 10.3. The Chair of Governors is briefed to oversee the teaching of maths and meets with Maths coordinator to review progress.
- **10.4.** Any changes made to this policy will be communicated to all teaching staff.