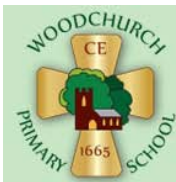




WOODCHURCH

CHURCH OF ENGLAND
PRIMARY SCHOOL

Mathematics Policy



MATHEMATICS POLICY

Rationale

Mathematics at Woodchurch C of E (Aided) Primary School enables each pupil to develop their confidence and capabilities; not only the mathematics knowledge, skills and understanding required for later life but also an enthusiasm for and fascination about Mathematics itself. We aspire for the children at Woodchurch C of E to be the best that they can be in Mathematics.

We aim to increase pupil confidence in Mathematics so that they are able to express themselves and their ideas using the language of Mathematics with assurance and fluency in order that all children have mastered key skills which are age related, depending on their stage of development.

Through the effective teaching of Mathematics, children will be able to:

- **Communicate** using mathematical vocabulary accurately and appropriately in their verbal and written work (including reasoning related to written calculations).
- **Demonstrate** positive attitude to Mathematics as an interesting and stimulating subject.
- **Appreciate** the nature of numbers and the relationship between mathematical patterns.
- **Develop** Mathematical fluency supported by the quick recall of facts
- **Identify** the uses of mathematics in the world, beyond the classroom
- Work **systematically**
- Work **collaboratively** or **independently**, including self-directed tasks, when applying skills and knowledge in a range of contexts including 'real life' situations
- **Establish** a secure foundation in mental calculation before standard written methods are introduced
- **Demonstrate** clear and logical mathematical thinking

We place importance on 'Maths in Context' and tackling 'Real Life' problem solving activities through a range of Problem Solving and Reasoning opportunities. As such, teachers plan for a Mathematics investigation on a regular basis. The Lifesavers money programme (Introduced September 2018) allows children to save on a regular basis enhancing financial education.

Early intervention in financial education is key to developing positive behaviours and attitudes in relation to money. In an increasingly complex financial world, it is more important than ever to develop the financial capability of children from a young age, and to equip teachers and parents with the confidence and knowledge to engage children in learning about money.

Our values-based approach to financial education explores what it means to be **wise, generous, just** and **thankful** with our money, recognising that attitudes are as important as knowledge and skills in shaping financial behaviour.

Woodchurch C.E. Primary School follows the new Rising Stars scheme (PEARSON) introduced into the school in September 2018. The scheme supports the schools aim to achieve the expected standard in mathematics by:

- being competent in their number skills
- using formal written calculation methods
- securing their understanding of fractions, decimals and percentages
- having a good problem solving and reasoning skills
- having a range of strategies to recall and use.

RESOURCES

Apart from class based resources; resources for the delivery of the Mathematics curriculum are stored centrally in the library. Materials are updated as new and relevant items become available; this includes the purchase of relevant 'Apps' to use on i-Pads. The Subject Leader will order new resources after consultation with the staff. We also have access to a range of resources from our link high school. My Maths is used through Key Stage Two to support learning at home and teachers have access to Maths No Problem text books.

TEACHING METHODS AND APPROACHES

Pupils engage in:

- Consolidation of basic skills and routines
- Mathematical discussion linked with understanding mathematical vocabulary
- The development of mental strategies
- Written methods
- Practical work
- Self-directed investigations
- A range of problems solving activities to use and apply

TEACHING AND LEARNING

Planning and Organisation

Planning is undertaken at three levels:

- **Long Term** - based on the core learning for each year group In the Foundation Stage the curriculum is guided by the Early Learning Goals which mirror the Foundation 2 Learning Objectives in the Renewed Framework.
- **Medium Term** - each term work is structured around the strands of learning. Teachers use the strategies and learning sequences identified in the five blocks of work (per term) as guidance, recognising the need to revisit topics regularly to revise and consolidate skills, extending and providing challenge wherever possible.
- **Short Term** - planning is carried out on a weekly basis and is responsive to children's needs. These plans include learning intentions, differentiation, key vocabulary, key questions and resources.

In Key Stage 1 and 2 Mathematics lessons are held on a daily basis (times for KS1/2) with two half hour 'Key Skills' sessions.

Mathematics contributes to many subjects and it is important that children are given opportunities to apply and use Mathematics in real contexts. Teachers realise that pupils need to be given time to develop their mathematical skills in other lessons. There should be regular carefully planned opportunities to develop key mathematical skills across the curriculum.

Assessment and Record Keeping

Assessment and tracking in mathematics is in accordance with the whole school policy. Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class, in conjunction with the teaching assistant and other colleagues through ongoing moderation.

Woodchurch C of E (Aided) Primary school we are continually assessing (Formative) our pupils and recording their progress. We see assessment as an integral part of the teaching

process and strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

Short Term (Formative)

Ongoing assessments are an informal part of every lesson and are closely matched to the Learning Intention. In line with Marking Policy, 'Tickled Pink, and Green for Growth' are used to highlight key areas of strength and areas for development. Supporting statements guide the pupil as to the next steps in their learning and time is allocated at the beginning of a lesson to allow children to review their next steps and complete corrections. Children will be assessed in relation to their Key Instant Recall Facts (KIRF's) to develop automaticity to support problem solving skills. Reactive Reviews are held daily to respond to children's needs with regards to addressing gaps in understanding during the main mathematics lesson or to allow for a 'pre-teach' to ensure children who require additional support can access the curriculum effectively.

Medium Term (Summative)

Throughout the year, children will complete half termly assessment's with a review week being held directly after to address app in learning. In Key Stage two, termly times tables tests will be introduced as of September 2018. NFER assessments identify children who need additional support and are used to identify key areas of strength and weakness.

Long Term (Summative)

Assessments are carried out towards the end of the school year when attainment is measured against school and national targets. Assessment outcomes is collated electronically.

In F2, children are assessed using Foundation Stage Profile. At the end of KS1 and throughout KS2 each pupil's level of achievement is measured through teacher assessment and Optional SAT's/Year 6 SAT analysis.

Special Educational Needs

The arrangements for children with special educational needs within mathematics lessons follows the guidelines set out in the school's SEN Policy. Wherever possible we endeavor to maintain an awareness of, and to provide for equal opportunities for all pupils in mathematics. We aim to fully include SEN pupils with appropriate IEP targets.

When planning, teachers will try to address the child's needs through simplified or modified tasks and/or the use of support staff for the most able as well as the less able.

Staff have been made aware of the potential difficulties of children with dyscalculia. Children who are identified on being Gifted and Talented are taught using appropriate Learning Intentions and work is differentiated accordingly. We also aim, whenever possible, to liaise with local high schools to enhance provision.

Inclusion

We strive to create a sense of community and belonging for all our pupils. We have an inclusive ethos with high expectations and suitable targets, a broad and balanced curriculum for all children and systems for early identification of barriers to learning and participation.

Equal Opportunities

As a staff we maintain our awareness of the importance of equal opportunities and provide appropriate support for all our pupils in mathematics. We take into account cultural background, gender and special needs, both in our teaching behaviours and in terms of the published materials and resources we use with our pupils.

MONITORING AND EVALUATION

Policy and practice in mathematics are monitored and evaluated on a termly basis in accordance with the school curriculum development planning cycle. The Mathematics Subject Leader and Headteacher work together to monitor the quality of teaching and learning in mathematics. The Subject Leader is given release time to monitor different aspects of mathematics teaching and learning

The Subject Leader will review the work of a sample of children by focusing on teacher's planning and the work in children's books looking at:

- Pitch and progression
- Learning Intentions and Success Criteria
- Differentiation
- Development of basic skills
- Evidence of Reasoning and Problem Solving
- Assessment for Learning
- High Expectations
- Marking and feedback

Regular **scrutiny** ensures guidance and feedback is in line with key areas for development and is timely.

Teaching and Learning in Mathematics is monitored and judged throughout the year in the form of '**Learning Walks**' and **Formal Observations**. '**Learning Walks**' are planned **termly** and focus on a key question generated by the Maths Subject Leader as a result of their own subject evaluation. This evaluation is based on matters arising from termly subject leader report or developments within the curriculum area. **Termly Formal Observations** are led by the class teacher who will identify an area of their teaching, issues in learning as well as an area of maths they wish to share and celebrate.

'**Learning Walks**' and **Formal Observations** provide opportunities for:

- children to talk about their learning and discuss aspects such as the calculating strategies they are using.
- discussion points for the whole staff in the development of teaching and learning in Mathematics.

As part of the monitoring process, **Assessment** data and information is collated, by the Maths Subject Leader, Assessment scores, data analysis and pupil performance information is carefully analysed and used to shape the termly Subject Leader Report with key identified and highlighted for whole school improvement and development.

<p>Policy submitted to Governors – September 2018 Review date – September 2020</p>
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