

Mathematics Policy 2020

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.

At St Paul's we also aim to:

- Engender a positive attitude to the learning and applying of mathematics in everyday life and in their daily lessons;
- Develop a numerate school where mathematical risk taking, creativity and logical thought are encouraged in order to develop independent thinkers;
- To promote confidence and competence with numbers and the number system;
- To develop practical understanding of the ways in which information is gathered, presented and interpreted;
- To explore the features of shape and space and develop measuring skills in a range of contexts and real life situations;
- To develop mathematical communication through the speaking and listening, practical activities and recording work, and encourage use of a wide range of mathematical language.

Role of the Subject Leader

The subject leader is responsible for the monitoring and evaluation of the subject. They are a source of information for staff about planning, teaching and learning that the children will undertake.

National Curriculum

All children will follow the National Curriculum framework. All classes will work towards their year group requirements in the programme of study and will be assessed against the expectations for their year groups.

In the Foundation Stage the children will be working towards the Early Learning Goals and will be integrated into the National Curriculum as soon as they are ready to progress. Early number is vital to be developed with support and activities structured appropriately to ensure a full understanding of the fundamentals.

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

- ✓ Practical activities and mathematical games

- ✓ Problem solving
- ✓ Individual, group and whole class discussion
- ✓ Open and closed tasks
- ✓ A range of calculating methods e.g. pencil and paper, mental, jottings, formal written methods, using a calculator
- ✓ Working with computers and other forms of technology as a mathematical tool

Scheme of Work

Our school scheme of work is working document that will be updated and reviewed on a yearly basis.

We are currently using the Focus Planning Materials as the framework for coverage and age appropriate content. This ensures that there is full year-by-year coverage of all the key learning for each year group. Informal assessment will also take place to ensure that the learning matches the needs and requirements of each cohort with some consolidation if needed.

There should be a mixture, and the opportunity for all children to experience, fluency, reasoning and problem solving based activities. This should happen across all abilities and in all areas of maths, allowing the children to think, plan and apply their skills in a range of contexts.

Planning

All teachers are adhering to the National Curriculum for Mathematics and use their Year group requirements for each year group in their yearly planning. School has adapted the Focus planning to ensure coverage but also so that it is tailored to the needs of each specific cohort. Short term planning, week by week, should show the key learning in each week, highlight vocabulary that is to be used and prior learning that will need to take place. It should also include the practical materials that will be used and any differentiation that may be needed, including placement of adults in the room. This is completed weekly but can be added to and adjusted daily depending on the informal assessment that takes place in the daily lesson.

Each class teacher is responsible for the planning and direction of TA in the classroom of the Daily maths lessons.

Planning is monitored by Subject leader and SLT on a regular basis.

Planning in Reception is in line with Early Learning Goals and aims to prepare children for their entry into Year 1 by the end of the Summer term.

SEND

Children with SEND are taught within the daily maths lessons and are encouraged to take part wherever possible. Differentiation and the use of Teaching Assistants plays a vital role in ensuring that all children are given the opportunity to progress at their own level.

Where applicable, children's IEP targets incorporate suitable objectives based on their needs and requirements and may involve the use of intervention strategies within or in addition to the daily maths lessons.

Children may also benefit from intervention strategies including specialised teaching, maths recovery, Springboard, Wave 3, Wrexham Maths Sums up for Y2 –Y6. We also work closely with TESS to ensure that any children with any specific needs can be identified quickly and strategies put in place.

Workbooks

All children have access to whiteboards although we have now adopted the use of jotters so that the children have a record of their learning and thinking to help in classwork and reminding children of previous learning.

Foundation satge and KS1 have plain books which will progress onto working in 1cm squares books through Year 2.

Year 3 have 1cm square books leading to 7mm square books. Year 4, 5 and 6 all use 7mm square books.

Marking

Marking should be both diagnostic and summative in nature and therefore should allow the teacher to make decisions about the next steps for that child.

The quality of marking is crucial and an indication of the error made, preferably in consultation with the child, would be a meaningful way to ensure that progress is made.

Children also need to understand their next steps, if appropriate, and understand how their work can be furthered through the marking and feedback from the teacher and teaching assistants.

Mark scheme – using green pen

- - Answer incorrect, giving child an opportunity to correct
- / - answer correct
- © - child corrected answer
- V - verbal feedback given

LO met – Learning objective met

WTLO – Working towards leaning objective

AN indication should be given about the method or process that the child has been using to work out the calculations and modelled if appropriate.

Explanation of the next steps and how to work towards achieving this learning should be commented upon or modelled if appropriate.

Children will also be marked against presentation and effort as agreed in the school marking policy.

Assessment and record keeping

Teachers will make daily informal assessments that should feed into the planning for the coming week and lessons. This could also feed into the pre learning tasks that children may need to do before beginning new tasks or concepts.

Mental Maths

Children will be expected to complete a mental maths test each week and the results shared with the children and teaching staff. The information gained from the test should be fed into the daily maths lesson and planning for the next steps of learning.

Formal written tests

Termly assessments will be completed for each child using the PUMA standardised scoring system. This will allocate a working towards, working at or greater depth standard for a particular year group. The test is also used to conduct a gap analysis and assess the gaps in knowledge and skills to feed into the next terms planning. This is shared with the subject leader so that an overall picture is formed of maths across the school, any training needs, cohorts with particular needs and also any children with specific issues.

Termly and half termly assessments

Target Tracker is the software we are currently using to assess the against the statements for each year group standard. This then feeds into the assessment of where in the Age Related Expectations each child is working. This is reviewed by the class teacher in progress meetings and by the subject leader to look for children not making adequate progress as well as those children who are not meeting their year group requirements.

Children who are not meeting these measures can then be brought to the attention of the subject leader and SEND leaders to decide next steps, if and when appropriate.

Formal assessment

At the end of each school year formal assessment will be made of each child in accordance with the school assessment policy.

Reporting to parents

Parent's evening will take place twice a year where every parent is encouraged to meet with his or her child's class teacher. Teachers will discuss each child's progress and progress against year group expectations, and details of these expectations will also be shared.

Reports are made to parents on a yearly basis in a formal document. Parents will be informed of progress made and the effort that their child has made in this subject.

Parents will be made aware of their child's progress against year group expectations with a comment of:

Working at ARE, Working towards/below ARE or Working beyond ARE

Homework

All children are expected to complete homework during the week.

In Reception the tasks are completed to fit in with the requirements of their particular curriculum.

Year 1 – no homework till after Christmas. After Christmas all children will be expected to complete one piece of maths homework a week relating to the work they have done in class.

Y2 – Y6 – at least one piece of homework to be completed a week relating to their work done in class.

Teachers may wish to use My Maths to set homework but must be aware that time is given to those children who do not have access to a computer at home.

Monitoring and evaluation

There will be informal drop ins for all classes on a regular basis by the leadership team and a formal lesson observation with a specific focus at least once a year.

Teachers would also be expected to be involved in book scrutiny of their class work on a regular basis to ensure coverage of the curriculum, appropriate quantity of work completed and that the marking and feedback policy is being adhered to.

The leadership team will feedback all findings to the Senior Leadership team and to all staff involved to develop and enhance the maths teaching and learning in school.