Mathematics Policy 2014

Mathematics is around us in every element of our world, we use it in our daily everyday lives in cooking, shopping, managing budgets, DIY and in the workplace, in science, geography, sport. Mathematics is an essential to everyday life; our role at Shottery is therefore to provide a mathematical education which will equip our pupils with the necessary skills and knowledge to tackle such tasks with confidence and allow our pupils to compute with accuracy and understanding as well as the ability to reason mathematically and judge whether answers are realistic.

Policy Reviewed by Staff: September 2014
Consultation with Parents via the school Website: October 2014
Date for Presentation to Curriculum Committee: November 2014
Approved:

Aims

Through our teaching of mathematics we aim to:

- develop confidence and competence in knowledge, skills, concepts and application
- develop an understanding of the importance of mathematics in every day life
- develop the ability to solve problems, to reason, to think logically and to work systematically and accurately
- promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion

Further reference should be made also to the school's Equal Opportunities Policy.

Expectations

The expectations for coverage and attainment are set out for Reception pupils, in the guidance for Early Years and for pupils in Year 1 upwards in the National Curriculum 2014. A progression in skills coverage may be viewed by following the link: http://www.primarycurriculum.me.uk/support

Teaching and learning.

We aim to provide all pupils with 2 mathematics sessions each day. A short 10-15 minute maths meeting which is taught to the whole class and consolidates key ideas in mathematics, fills any gaps in understanding of mental arithmetic, and revises 'essential skills mathematics' and a second longer 1 hour session in which children are taught in ability sets. Across the week in these longer sessions children will have access to direct teaching, interactive oral work, mental calculation and differentiated activities as well as problem solving and investigations. There will be a balance, appropriate to learning, of whole class, group and individual work where pupils will be encouraged to question, discuss and explain their reasoning. There will also be the opportunity for younger pupils to reinforce their learning through games, songs and play. Throughout the school pupils will have the opportunity to practise their mathematics in real life experience so that they will understand the relevance for learning. The ability to carry out mental calculations both quickly and competently is given high priority and all classes take part in daily mental arithmetic sessions where emphasis is given to completing a set number of questions within a short time frame. The aim is for pupils to develop not only a series of mental arithmetic strategies but also to develop a sense of speed and urgency. Mathematical vocabulary, an ability to estimate and to present their work neatly and logically will also be given importance. Class teachers aim to create an environment where pupils are secure and feel confident in being able to take risks in their learning and to ask when they have not understood.

Ensuring good progress

The school employs various strategies to ensure pupils and cohorts make good progress. All lessons have clear learning intentions which pupils are made aware of. Pupils are aware of their expectations for success and what they must do to achieve this. All pupils have clear targets, and what they need to do to progress further. The school will ensure appropriate additional support is given to pupils who do not make the expected level of progress

Assessment and recording

Short term: Regular marking and feedback informs the next steps in learning.
Medium term: Learning target ladders are used to make a judgement of attainment and identify the gaps and next steps for learning.

Long term: Optional SATS papers and other assessment tests are used to assess learning from Year 2 to Year 6 and data is entered and analysed through O track. Pupil progress meetings are held with each member of staff to discuss progress and the next steps.
Learning Target Ladders may be viewed via http://www.learningladders.info/product/maths-ladders/

Reporting to parents

Parents are given the opportunity to discuss their child's progress and look at their child's work at parents evening but understand that the schools' open-door policy enables them to address concerns throughout the year. Parents are provided with 3 written reports a year. Teachers use the information gathered from both formative and summative assessment to comment on individual children's progress.

Resources

Maths equipment is accessible to children to allow for independent selection of appropriate materials. Each class is equipped with basic mathematical resources.
Each classroom has access to at least one computer with smartboard which is linked to the network. In addition classes have access to iPads, laptops and MacBook's. A range of mathematical software is available to support and enhance learning.

Homework

It is our school policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief, but are valuable in promoting children's learning in mathematics. Pupils in set 1 and set 2 are set weekly maths homework using the online tool MyMaths.

Monitoring and review

Monitoring of the mathematics curriculum, planning and standards of learning are the responsibility of the Maths Subject Leader along with the Headteacher. The work of the mathematics subject leader also involves supporting and mentoring colleagues, keeping informed of developments in the subject and providing a strategic lead and direction for the subject within school. Formal monitoring of planning, teaching and learning will be carried out termly. This will include learning walks, observations and work scrutiny. The focus and organisation of this is determined by school priorities which will inform and drive the action plan with the ultimate aim of continually improving the quality of teaching and learning, achievement and attainment in mathematics.

Ensuring Equality

At Shottery St Andrew's Primary School we are committed to ensuring equality of education and opportunity for all children. We follow the necessary regulations to ensure that we take the experiences and needs of all children into account when planning for teaching, learning and pastoral support. We constantly identify those children who may be missing out, difficult to engage, or feeling in some way to be apart from what we seek to provide. We aim to develop a culture of inclusion and diversity in which all pupils are able to participate fully in school life and achieve their learning potential. We will make reasonable adjustments to ensure that barriers to learning are removed and the school environment and the Maths curriculum are as accessible as possible.

Role of the Coordinator

To take the lead in policy development; To support colleagues; To monitor progress in Mathematics – eg leading staff CPD, scrutiny of work, analysis of formal assessment data; To take responsibility for the choice, purchase and organisation of central resources for Mathematics, in consultation with colleagues. To liaise with other members of staff to form a coherent and progressive scheme of work which ensures both experience of, and capability in, Mathematics; To be familiar with current thinking concerning the teaching of Mathematics, and to disseminate information to colleagues.
The co-ordinator will be responsible to the Headteacher and will liaise with the named link Governors.