Norton CEVC Primary School Mathematics Policy

Learn Believe Achieve Hand in hand with God and each other



Vision

We understand the learning of mathematics to extend beyond learning concepts, procedures and their application. We want children to develop positive dispositions towards mathematics and appreciate it as a powerful way for looking at situations.

Aims

We aim to develop children's mathematical dispositions so that they are able to approach tasks with confidence, be willing to explore alternatives, persevere and reflect on their own thinking. We work towards children:

- developing self-confidence
- collaborating with others
- being flexible
- showing curiosity
- demonstrating resilience

We hope that children can use maths in meaningful ways and develop positive attitudes and conceptual understanding from the Early Years Foundation Stage through to Year 6.

Teaching and Learning

Children at Norton CEVC Primary School follow the National Curriculum 2014 and refers to White Rose Maths. A substantial amount of time is devoted to the teaching and learning of mathematics in order to build a strong foundation for the acquisition of mathematics knowledge and skills within later years. Within this, there are a number of ways in which our vision and aims inform the approach we take with regard to the planning, teaching and assessing of mathematics.

PLANNING

Effective learning of mathematics requires a coherent and well-structured syllabus; across the school we follow a mastery approach. All lessons are planned and sequenced so that new knowledge and skills build on what has been taught before. Teachers follow the White Rose materials; however, the scheme has been adapted to meet the needs of the school and the children. All year groups have a detailed long-term plan which follows the White Rose overview with a medium-term plan detailing the small steps that will explicitly teach key mathematical skills. Our curriculum emphasises conceptual understanding, skills proficiency and the learning of process skills. In alignment with the National Curriculum, its underpinning threads are problem solving, reasoning and fluency.

TEACHING

There is a commitment to children's active participation in lessons, the discussion and sharing of ideas, the addressing of misconceptions and demonstrating the meaningfulness of mathematics. Teachers use sound pedagogical strategies that are developmentally appropriate, alongside a well-selected range of instructional materials. We follow a mastery approach; all children have the opportunity to 'master' the mathematical skill being taught, this is through the careful selection of resources used during a lesson and sequential planning of the small steps.

ASSESSING & RECORD KEEPING

Our mathematical assessment evaluates children's appreciation of the role and value of mathematics, as well as their cognitive progress. Such assessment informs teachers' planning so that any gaps in children's understanding

are addressed. Written or verbal feedback is given to help guide children's progress. Teachers use 'green pen marking' to show where pupils need to edit their work and children respond using a purple pen.

We make long-term assessment towards the end of the school year and we use these to assess progress against school and national targets. We can then set targets for the next school year. We pass this information on to the next teacher at the end of the year. We use national tests for children in year 6. Foundation children are assessed half-termly against the Foundation Stage Profile.

Early Years Foundation Stage

Children follow the Early Years Foundation Stage Curriculum. We give all children the opportunity to talk and communicate in a widening range of situation and to practise and extend their range of vocabulary and maths skills. They have the opportunity to explore, enjoy, learn about, and use mathematics in a range of situations. Mathematics is planned on a half termly basis and assessed using the criteria from the Early Learning Goals. Mathematics is taught both as a discrete subject and within the whole Early Years Curriculum to give children opportunities to use their Maths skills in real life situations.

Resources

Basic resources are located within individual classrooms with a further resource bank in the hall cupboard. Resources within individual classes should be accessible to all pupils who should be encouraged to be responsible for their use.

Technology

Calculators will be used at appropriate times within the mathematics curriculum. The school also has programmable toys such as Bee-bots. The children have access to TTRockstars which are online resources.

Equal opportunities and Special Educational Needs

The mathematics curriculum should be delivered in a flexible way, which gives equal access to all children regardless of gender, race or ability.

Monitoring and Review

Monitoring the standards of children's work and the quality of teaching in mathematics is carried out termly. The work of the Maths subject leader involves supporting colleagues in the teaching of maths, being informed about current developments in the subject and providing a strategic lead and direction for the subject in the school. The Maths subject leader has leadership and management time in order to enable her to review samples of the children's work and undertake lesson observations of Maths teaching across the school. The subject leader reports to the governors' Curriculum Committee regularly. Alison Bass is the named governor responsible for Maths.

Subject leadership

The subject leader is Chelsie Winter-Valentine.

Staff are keen to develop their subject knowledge and the subject leader takes an active role in disseminating best practice and making recommendations for staff development.

School Development Plan

Maths is reviewed each year in the light of experience and test results and then targets are revised or added as appropriate to the School Development Plan. The School Development Plan is reviewed during the years and action plans or points are drawn up if required

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching is the responsibility of the maths subject leader. The work of the subject leader also involves supporting colleagues in the teaching of maths.

SMSC

Maths at Norton allows children to develop deep thinking and questioning about the way the world works. This helps promote spiritual growth for our children. We aim to give all children an appreciation of the power of maths and how it has developed over time. We provide all children the opportunity to experience real life problem solving. We promote discussion about our understanding and support each other during lessons. We use a mastery approach which allows in-depth discussion as a class, in small groups and in pairs, we encourage children to share their ideas with each other and explain their thinking. We encourage the children to appreciate the wealth of mathematics in all cultures. We look at the history of maths and its development. Examples of this include how the different number and measuring systems have evolved. Pupils look at the number systems used by other countries, such as Chinese numbers and how Roman numerals are used particularly on clocks.

This policy will be reviewed every two years.