
Dry Drayton CE (C) Primary School

Mathematics Policy

The Purpose of this Policy

This policy and guidance reflects the school's values and philosophy in relation to the teaching, organisation and management of the mathematics taught and learnt at Dry Drayton CE (C) Primary School. The policy has been drawn up as a result of staff discussion and has been approved by the school's Achievement, Curriculum and Communications Committee and Full Governing Body. It sets out a framework in which the teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

This policy and guidance should be read in conjunction with the National Curriculum 2014 and the EYFS Curriculum. This document is intended to be used by all teaching staff, school governors, inspection teams and the County Advisory and Inspection personnel. Copies are available to parents from the school office.

Our aims in teaching MATHEMATICS

This policy and guidance states how we work to achieve our aims in mathematics. It is based on the rationale that all children at Dry Drayton Primary School should receive their full entitlement to an education that is broadly balanced, inclusive and which develops progressively throughout their school life.

To do this we must develop skills, concepts and attitudes in Mathematics and also teach material and subject knowledge.

Our Mathematics aims are:

- for children to become **fluent** in the fundamentals of mathematics
- for children to **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- for children to **solve problems** by applying their mathematics to a variety of routine and non-routine problems

Our philosophy is 'to enable children to become mathematicians by encouraging curiosity about maths and providing them with a love of maths through exciting and challenging experiences'

These aims are consistent with our school philosophy and take account of the EYFS Curriculum the National Curriculum 2014 and guidance from the Local Authority.

Teaching Objectives, and Teaching and Learning Strategies

The EYFS Curriculum guidelines and the National Curriculum 2014 specify a syllabus for the Primary School which will provide the children with;

- Proficiency, confidence and competence with numbers and measurement;
- An understanding of our number system;
- A repertoire of computation skills (mental and formal written methods);
- Rapid mental recall of number facts;
- The ability to solve problems in and out of context;
- A practical understanding of the various ways in which information is gathered by counting and measuring;
- A practical understanding of how information can be represented in, and interpreted from, graphs, diagrams, charts and tables.

Links will also be made to mathematics within other subjects in order for pupils to develop and apply their mathematical skills. Opportunities will be sought to draw mathematical experience out of a wide range of activities to enable children to use mathematics in real contexts.

Teaching Time

To ensure that there is adequate time for developing Mathematics skills and knowledge, each class teacher is expected to provide a daily, dedicated Mathematics lesson of approximately 45 minutes to 1 hour. In Reception, children work on a variety of mathematics activities throughout the day, for short periods.

A typical daily mathematics lesson in Year 1 to 6 will usually be structured like this:

- Oral work and mental calculation (about 5 to 10 minutes). This will support children in learning and recalling number facts and developing mental strategies for carrying out calculations.
- The main teaching activity (about 30 to 40 minutes). This will include both teaching input and questioning as well as pupil activities and a balance between whole class, grouped, paired and individual work. This will enable pupils to: work on new ideas with support; practice new ideas independently; consolidate learning.
- A plenary (about 10 minutes). This will provide an opportunity for assessment, both self and teacher, through well structured AFL questions. Children take this time to reflect on their own learning and consider next steps.

Class Organisation

The school uses a variety of teaching and learning styles in mathematics lessons. During these lessons we encourage children to ask, as well as answer, mathematical questions. They have the opportunity to use a wide range of resources such as number lines, number squares, digit cards and small apparatus to support their work. The school also promotes the use of investigational and problem solving material to allow children to apply their mathematical skills in a variety of situations. In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies – in some lessons through differentiated group work and in other lessons by organising the children to work in pairs or individually on open-ended problems or games. We use teaching assistants to support some children and to ensure that work is matched to the needs of individuals.

Planning

The School uses the New National Curriculum 2014 to plan long term, medium term and weekly lesson plans. These plans are available on the

Staff Shared drive. Homework is given to pupils weekly. Details can be found in the Homework Policy and in the KS2 Homework Guidance document.

Information Communication Technology (ICT)

Information Communication Technology is an integral part of numeracy lessons. ICT includes the computer and calculator and extends to the whole range of audio-visual aids. ICT can be used as part of the daily mathematics lesson to support teaching and to motivate children's learning. The ICT provision during Numeracy lessons will support the scheme of work for ICT.

Assessment, Recording and Reporting

Assessment is used to inform teaching in a continuous cycle of planning, teaching and assessment. Observations and continuous assessments are an informal part of every lesson to check children's understanding and are used to inform teachers' day-to-day lesson planning. Teachers regularly assess children's understanding against the National Curriculum objectives.

The children will also carry summative assessment tasks during the Autumn Term and Spring terms, followed by SATs or tests for Years 2 to 6 in the Summer Term. This data, as well as teacher assessments, are used to set targets and track children's progress throughout and from year to year. These targets are then incorporated into performance management targets when addressing the area of pupil progress targets.

Reporting to parents is done termly through interim reports which coincide with Parent Consultation Evenings and annually through the full written End of Year School Report.

For further guidance on assessment please refer to the Assessment, Recording and Reporting Policy.

Resources

We have a range of mathematical equipment to support all areas of learning and age ranges. These resources will continue to be developed year on year.

Resources are reviewed regularly by the subject leader and staff to ensure that materials used by the children are appropriate and up-to-date.

Monitoring

Monitoring the standards of children's work and the quality of teaching in mathematics is the responsibility of the mathematics Subject Leader, who, in turn, reports to the Headteacher. The work of the Subject Leader also involves: supporting colleagues in the teaching of mathematics; reviewing teachers' medium term and short term plans for mathematics to ensure match with the National Curriculum; collecting samples of children's Mathematics work to conduct work scrutiny; being informed about current developments in the subject; providing a strategic lead and direction for the subject in the school. The Governing Body oversees the implementation of the National Curriculum 2014 in school.

Equal Opportunities – Inclusion for All

All teaching and non-teaching staff at Dry Drayton CE (C) Primary School are responsible for ensuring that all children, irrespective of gender, ability, ethnic origin and social circumstances, have access to the whole curriculum. We aim to give every pupil the opportunity to experience success and achieve as highly as possible.

To achieve this we provide carefully planned and identified intervention groups to support pupils in their learning and aim to narrow the gaps in their understanding. This can be targeted through working on a 1:1 basis or in a group. Pupils with Special Educational Needs in this subject will have a maths target on their Pupil Support Plan.

Community Links

Information about the maths curriculum is available on the school website.

Parental twilight sessions are held every two years to demonstrate how calculation strategies are taught across the school. We encourage parents to help in school and this may include supporting mathematics

lessons with small groups or individuals under the guidance of the class teacher.

There are also opportunities for more able children to attend Maths enrichment programmes linked to Comberton Village College.

Health and Safety

It is the responsibility of the class teacher to ensure a safe working environment for the children.

Arrangements for Review

This Policy has been produced collaboratively and is a reflection of the shared values of the Staff. It will be implemented during the Autumn Term of 2015. It will be reviewed every two years; or earlier if there are significant changes to the Mathematics Curriculum. In the first instance this will be in the Autumn Term 2017.

Sue Gilbey
MATHEMATICS Subject Leader

September 2016

Ratified by ACC committee – 23/09/2015

To be reviewed – September 2016