



Making the most of everyone.

# ***Mathematical Development Policy***

**Policy Adopted March 2014**

**Policy Reviewed 11<sup>th</sup> March 2019**

**Policy Valid until March 2021**

**Signed:**

**(Chair of Governors)**

# Ysgol Penmorfa

## Policy for Mathematical Development (Foundation Phase) and Mathematics (Key Stage 2)

### Aims

At Ysgol Penmorfa we aim to:

- stimulate children's curiosity, interest and enjoyment for learning through a variety of approaches and strategies
- develop the ability to solve problems through decision making, drawing on experience, thinking logically and reasoning in a range of contexts
- provide opportunities for children to present their work in a variety of ways
- promote confidence and competence with numbers and the number system using an agreed format of calculation progression
- develop the children's ability to estimate, calculate and evaluate
- develop a practical understanding of the ways in which information is gathered and presented
- explore feature of shape and space and develop measuring skills in a range of contexts
- provide a sense of challenge and achievement for all pupils
- improve the children's ability to discuss and explain their methods and calculations using mathematical language

### Planning

In the Foundation Phase, planning takes place on three levels.

Our long term planning is based upon the Mathematical Development Area of Learning document and the Foundation Phase Framework.

Medium term plans are written half termly in year groups and outline anticipated learning outcomes for each area of learning based on a topic. Staff identify aspects of the Foundation Phase skills and range for each subject. Opportunities for developing literacy and numeracy skills are also included in the medium term plan.

Short term plans are written in year groups weekly. Following mind mapping activities children's ideas are incorporated where appropriate. It is important that planning is carried out weekly; this flexibility ensures that previous

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learning is built upon. Weekly plans include detail about focused tasks and codes indicate skills covered. TA (teaching assistant) supported and independent tasks are also outlined on weekly plans. Enhancements to classroom areas are discussed weekly and recorded over the half term. Opportunities for developing Literacy, Numeracy and the Digital Competency Framework (DCF) are included on the weekly plan and are identified using a code and a brief description of the specific skill developed.

Teaching assistants are involved in the planning process and feed back to teachers via their weekly planning sheets.

Each half term a 'Parent Information Sheet' is sent home, outlining some of the anticipated activities for the topic.

Each cohort of pupils has a planning book in which a record is made of when aspects of the skills and range are covered. This book travels through the Foundation Phase with each cohort of children. All plans are evaluated and highlighted to inform future planning.

In Key Stage 2 planning takes place at three levels.

Our long term planning is based upon the Programmes of Study for Key Stage 2-3.

Medium term plans are written in year groups, prior to the topic being delivered and are based on a thematic approach. The national curriculum subject range is documented on a Topic Range grid and an adapted version of this is sent home to parents.

Short term plans are written by each year group. Weekly planning records:

- Subject skills using codes from the Key Stage 2 Planning Book
- A brief overview of the activity
- Differentiation in English and Maths
- Opportunities for developing Cwricwlwm Cymreig across the curriculum
- Opportunities for developing the DCF, Education for Sustainable Development and Global Citizenship (ESDGC) and Assessment for Learning (AFL) strategies.

All plans are evaluated and highlighted to inform future planning. The planning is a working document, enabling Key Stage 2 teachers to write, adapt and edit regularly in order to suit the needs of their class.

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## **Differentiation**

In the Foundation Phase teachers differentiate activities for various abilities within their class across the curriculum. Weekly plans show detailed differentiation for Language, Literacy and Communication and Mathematical Development, based where appropriate on Foundation Phase outcomes.

In Key Stage 2 focus is very much on the needs of the learner and planning is closely linked to National Curriculum skills and level statements. Pupils are supported in a variety of ways, including; differentiated tasks, differing levels of support and peer support.

## **Marking, Assessment and Reporting**

Learning is tracked during focused tasks and feedback is provided to pupils verbally as well as during written marking. Observation also forms a large part of teacher assessment. Pupils work is marked regularly in line with Ysgol Penmorfa's marking policy.

### **Assessment**

Assessment is an ongoing process with pupil's attainment, based on Foundation Phase Learning Outcomes and Key Stage 2 Levels, updated and tracked and placed on an assessment tracker.

Assessment for Learning techniques such as 'Two stars and a Wish', 'thumbs', and 'partner talk' are used regularly to encourage pupils' participation in evaluating their learning and to provide effective feedback. Pupils are given opportunities to work towards their individual targets for Literacy and Numeracy. Pupils are encouraged to reflect upon their work in order to form their own targets. The targets are then displayed in the classroom using the 'Teddy Target' display cards in the Foundation Phase and in pupils' books in Key Stage 2. The children are encouraged to refer to, and work towards these targets across the curriculum.

Parents are kept informed of their children's progress through Parents' Evenings. A written report informs parents of their children's attainment and next steps.

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During the summer term, pupils from Year 2 to Year 6 complete National Tests in Procedural skills and Numerical Reasoning in line with statutory requirements.

### **Teaching and Learning Style**

In the Foundation Phase, Mathematical Development is taught during focused group tasks with teachers and classroom assistants in both the classroom and outdoor areas. Mathematical skills are also developed using continued and enhanced provision in the Maths Area of each classroom and in outdoor areas. Specific teaching and activities for target groups is also provided for those children who need extra support or challenge. Mathematical Development homework is sent home weekly in Years 1 and 2.

As they progress through Key Stage 2 learners build on the skills, knowledge and understanding they have already acquired during the Foundation Phase. Mathematical Development is taught in a range of ways including whole class, grouped, paired and independent work with each class being grouped according to ability to cater for their differentiated needs.

### **Cwricwlwm Cymreig**

Pupils will be given opportunities to develop and apply their knowledge and understanding of the cultural, economic, environmental, historical and linguistic characteristics of Wales.

### **Additional Learning Needs including More Able & Talented**

Experiences and opportunities are provided to all pupils, whatever their ability. Learning opportunities are matched to the needs of all children, to include challenge and support for our most and least able. When necessary this takes account of any targets set for pupils in their Individual Education Plans (IEPs).

### **Equal Opportunities**

All pupils will have access to teaching, resources and equipment and equal opportunity will be given to all regardless of gender, culture, race, religion, language or ability.

### **The Role of the Subject Leader**

The main responsibilities of the Subject Leader are:

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- Maintain and update the subject policy
- Monitor planning and standards within the subject
- Provide support and guidance to colleagues
- Resource management
- Produce an action plan and lead in the development of the subject

### **The Role of the Phase Leader**

Subject Leaders are led by and report to the Phase Leaders. The Phase Leaders are responsible for the management of the curriculum as a whole. They monitor subject development and report to the Governing Body.

### **Governor Involvement**

The Curriculum Sub Committee will be kept updated of any changes to the curriculum, schemes of work and policies, who will then report to the full Governing Body. All Governors are welcome to observe the delivery of lessons within the school.

### **Health and Safety**

All staff are committed to ensuring a high standard of health, safety and welfare for all other staff, pupils, visitors and contractors by providing a healthy and safe environment throughout the school. Teachers are aware of the school's Health and Safety policies. Risk assessments are carried out for school visits. Health and Safety is taken into account during practical activities.

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