Blaenavon Heritage Voluntary Controlled Primary School



MATHS POLICY

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CoG:

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This document is a statement of the aims, principles and strategies for the teaching and learning of maths and numeracy.

At BHVC Primary School, we believe that maths equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Maths is important in everyday life. It is integral to all aspects of life and, with this in mind, we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them.

Purpose:
The purpose of this policy is to develop a common approach to the teaching of maths which will ensure continuity and progression throughout the school.

Aim(s):
Our aims in teaching maths are:

- To develop a positive attitude towards maths as an interesting and enjoyable subject.
- To develop an ability to think clearly and logically in mathematics, with confidence and independence.
- To provide opportunities for investigation and the ability to use the appropriate equipment or materials for a task.
- To develop numeracy skills and knowledge accompanied by the quick recall of the basic facts pupils will need for everyday life.
- To develop the ability to express ideas fluently and to talk about the subject with assurance.
- To use the language of mathematics.
- To develop the ability to apply numeracy skills to a variety of real life and authentic contexts.

Wider school aims/ethos:
The policy is underpinned by the school's vision, aims and values.

Principles/Values:
The acquisition of effective numeracy skills depends on a carefully planned curriculum that offers extensive opportunities to develop and apply what has been learnt within maths lessons to real life contexts. From entry to the school, all children are immersed in a numeracy-rich environment and, as teachers, we seek to ensure that the classroom is equipped and organised so that children may develop and practice their skills continuously. Children with Additional Learning Needs and those with English as an Additional Language (EAL) will be given support, which will enable them to access the numeracy curriculum. EAL children's expertise in their first language will also be valued and respected. Throughout their time in our school all children will be supported and encouraged to achieve their personal best.

At BHVC, we endeavour to ensure that all pupils leave our school as confident, numerate individuals.

Numerate primary pupils should:

- Have a sense of the size of a number and where it fits in to the number system.
- Know by heart number facts such as number bonds, multiplication tables, division facts, doubles and halves.
- Use what they know by heart to figure out answers mentally.
- Calculate accurately and efficiently, both mentally and on paper, drawing on a range of calculation strategies.
- Recognise when it is appropriate to use a calculator – and when it is not – and be able to use one effectively.
- Make sense of number problems, including non-routine problems and recognise the operations needed to solve them.
- Explain their methods and reasoning, using correct mathematical terms, judge whether their answers are reasonable and have strategies for checking them when necessary.
- Suggest suitable units for measuring and make sensible estimates of measurements.
- Explain and make predictions from the number in graphs, diagrams, charts and tables.

Organisation of Maths teaching
Within our school, maths is planned as follows:-

- All teachers use the Curriculum for Wales to plan maths sessions and ensure the four purposes are used as a starting point to shape all learning experiences.
- Teachers refer to the TAPAS and ETM documents for further guidance and structured information on effectively teaching maths. These documents all provide the long-term planning for Maths and are referred to by teachers when developing their medium-term planning.
- Medium term planning takes place every half term and sets out stimulating planned opportunities for pupils to develop their maths and numeracy skills. Activities are often linked to the theme/topic for the term based on pupil voice. Staff should take into account prior assessments as well as the expected coverage from the ETM when completing their medium-term plan.
- Teachers ensure that the work planned is appropriate for the age, stage and ability of their children, using information from formative and summative assessments. They use strategies such as pair and small group work to allow children to communicate and cooperate with their peers.
- Strategies, such as talk partners, are an integral part of maths' teaching at BHVC. Opportunities for Assessment for Learning should be maximised throughout Maths and Numeracy sessions to ensure work is appropriately planned.

- Teaching groups are flexible, to account for children's progression, and pupils are able to move groups as required.
- Each class has an interactive TAPAS board that is used throughout the maths sessions. These boards include consistent images that are progressive throughout the school. Staff should use the TAPAS book to ensure the images are appropriate for the age and stage of their pupils. It is important that the TAPAS board is used as a teaching board to scaffold learning and that it does not become a display board.
- All Foundation Phase classrooms have a Maths Area where pupils can access continuous and enhanced provision. These areas should be progressive throughout the Foundation Phase and contain appropriate resources and challenges which are accessible to the pupils.
- Pupils from Year 2 to Year 6 are registered with Mathletics, an online system which allows teachers to set work to support in class teaching.
- Pupils from Years 1 to Year 6 complete the Times Table challenge weekly to develop instant recall of number facts
- For maths teaching during periods of school closure, please see Blended Learning Policy.
- For presentation of maths books, please see Presentation Policy

Assessment and Reporting:

- Short term, informal assessments are made during each lesson. These are linked to the learning objective/s of the lesson. Pupils are given constructive oral feedback from teachers and open dialogue is encouraged so that pupils are part of the assessment process and can see how they may move their work on in order to make the next steps.
- Targets are set for each child in Maths/Mathematical Development during the Autumn term and reviewed termly. These, along with progress, are shared with parents at regular consultations.
- Progress Towards Personal Targets review meetings are held termly to discuss individual class progress and attainment. Pupil data is scrutinised to ensure appropriate progress is being made and monitored effectively.
- During the Summer term pupils from Y2 to Y6 sit WG Numeracy Tests. The tests consist of two tests: Procedural and Reasoning. Both the Procedural and Reasoning tests are completed online and adapt to the needs of individual children. The results of these tests will provide information about progress as they move through the school. This data will be analysed to provide information on strengths and areas for development within Numeracy teaching and learning.
- Diagnostic assessments of the Numeracy Tests are completed by class teachers and used to inform planning.
- Children entering Nursery and Reception complete a baseline assessment which incorporates Maths and Numeracy. This information provides information for the school, gives a basis from which to track the pupils and enables teachers to plan the learning experiences appropriately.
- At the end of the Foundation Phase and Key Stage 2, pupils are assessed in Maths and Numeracy. They are given a level based on their attainment in all strands of Maths: Using and Applying; Number; Shape, Space and Measure and Handling Data. These assessments are made by teachers in accordance with the statutory assessment arrangements in Wales.
- All pupils receive an End of Year report during each academic year, giving information on the child's attainment and achievements in Maths. Targets are also provided for future development and improvement.
- Statutory moderation takes place each year for children in Year 6. Work is moderated as a cluster to ensure consistency of teacher assessment. Moderation and standardisation of work from other year groups is completed during staff meetings throughout the year.

ROLES AND RESPONSIBILITIES

Governors: will review the policy as and when required and should have an understating of the policy when conducting their link governor role.

Head Teacher: will ensure the policy is adhered to and monitor and review.

Head of Department: The Co-ordinators will ensure that the school implements the teaching and learning experiences outlined in this policy. They will guide, support and lead teaching staff as appropriate, providing information and practical assistance where necessary. It is also the responsibility of the coordinators to monitor standards in Maths/Numeracy and to keep staff informed of recent developments on both a local and national level, provide training and lead initiatives. They will also liaise with colleagues within the school cluster, as well as other agencies including advisory teachers and providers of numeracy-based events/activities. Numeracy, at every opportunity, will be given a high profile throughout the school.

Teachers: should ensure they understand and carry out the policy. Any comments about the policy should be shared during the review process.

Pupils: should be taught how they can follow the policy and ensure they aspire to the best standards of numeracy.

Equal Opportunities
All children, regardless of gender, race, cultural background, religious belief or ability are able to access the Maths curriculum at BHVC Primary School.

Health and Safety: Please see policy.

Planning: All staff should plan to ensure the policy is taught to pupils and is adhered to in their everyday work.

Teaching: All staff are responsible for the implementation and teaching of the expectations within the policy.

Organisation: The Maths policy is organised for the whole school and is age related at certain sections.

Resources: Resources that affect the implementation of the policy should be reported to the stock controller in the school office. Staff must ensure that resources are in plentiful supply and that development of maths skills are not affected due to resource issues.

Any failure to follow this policy should be immediately reported to the Head teacher or Deputy Head teacher.

MATHS LEARNING WALK CHECKLIST

Date: _____

Arfer dda / Good practice		
1. Maths display in classroom – including children's work		
2. Maths area in classroom (FP)		
3. Bead bar present and labelled appropriately		
4. TAPAS sheets on wall		
5. Correct numberline displayed (FP)		
6. PV boards complete, easily accessible and age appropriate		
7. Maths resources clearly labelled and organised		
8. Maths resources are age/ level appropriate		
9. Maths challenge/ enhancement		
10. TAPAS board: Organised, appropriate and relevant		
11. Number sticks – age/level appropriate		
12. Additional comments		