



## BAWB Federation Maths Policy

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### Equality Statement:

At The BAWB Federation we work hard to ensure that the culture and ethos are such that, whatever the abilities and needs of members of the school community, everyone is equally valued and people treat one another with respect. Our schools provide pupils and staff with the opportunity to experience, understand and value diversity. In the operation of this policy, we will endeavour to ensure that all members of our school community receive equal treatment irrespective of their age, gender, race, colour, ethnic origin, family commitments, marital status, sexual orientation, disability or religious beliefs.

### Distinctive Christian Vision

This policy has been written and/or adopted with our distinctive Christian ethos in mind:

*Rooted in the message of the Good Samaritan, we provide an aspirational education for all. We flourish academically, spiritually, and socially.*

*Matthew 22v 37-39 (NEB): Love the Lord your God with all your heart, with all your soul, and with all your mind. Love your neighbour as yourself.*





## INTENT

Mathematics equips pupils with a 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.

Mathematics is important in everyday 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.

The National Curriculum for mathematics describes what must be taught in each key stage. The BAWB Federation follows mixed-age, long term planning developed by the Archimedes Maths Hub. This provides detailed guidance for the implementation of the National Curriculum for mathematics and ensures continuity and progression in the teaching of mathematics. In early years, the curriculum is guided by the Early Learning Goals.

The principles within the BAWB Federation for mathematics are:

- 1) policy and provision are evaluated and reviewed regularly.
- 2) resources of time, people and equipment are planned, budgeted for and detailed when appropriate.
- 3) cross curricular links will be highlighted where appropriate.
- 4) planning of mathematics ensures continuity and progression across all year groups and key stages

We aim to provide the pupils with a mathematics curriculum which will produce individuals who are literate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to their full potential.

Mathematics contributes to many other subjects and opportunities will be sought to draw mathematical experience out of a wide range of activities. This will give children the opportunities to apply and use Mathematics in real contexts.

We endeavour at all times to set work that is challenging, motivating and encourages the pupils to talk about what they have been doing. We also work hard to help our children to develop a 'growth' mindset. For this reason, we have decided, as a Federation, not to use ability groups in our classes due to evidence that this can hinder the development of self-confidence and progress.

## IMPLEMENTATION

### Arithmetic

- 1) Arithmetic skills are developed systematically through the use of the Space Mission, which develops mental skills and techniques as children move up through the school. The children are engaged with exciting activities and challenges at least three times a week.
- 2) We carry out daily multiplication tables practice as part of the maths lesson. This is differentiated for different stages, with children at the top of the school challenged to extend their times table knowledge into decimals and powers of 10 (e.g.  $40 \times 6 = 240$ ;  $0.4 \times 6 = 2.4$ ). These sessions would typically last for 5 minutes, with children expected to also practise their times tables at home.
- 3) Another key part of our daily maths lesson is our 15 minute calculations section. Children practise their fluency in all four operations and are encouraged to tackle more challenging tasks, such as missing number problems, where appropriate. Children are taught structured and agreed methodology for each of the four calculation methods; please read the calculation policy.

### Reasoning and Problem-Solving

1. Teachers follow the Archimedes hub mixed-age medium-term planning. This ensures careful progression through the learning objectives within each year group, with White Rose fluency, problem-solving and



reasoning tasks matched to these objectives. In addition, this medium-term planning provides links to high quality exploratory challenges on the Nrich website.

2. While the Archimedes scheme underpins our short-term planning, it does not target the individual needs of the pupils within our schools. Our teachers use their own expertise and understanding of the pupils in their class to plan for these needs within their short-term planning, identifying additional support and additional challenge that will be made available. Teachers identify the children for whom this additional provision is most helpful within their planning, however **all** children are encouraged to access the additional support or challenge as appropriate. We do not use ability groups.
3. Mathletics is an ICT programme which gives children the opportunity to test their understanding of key objectives. The teachers set work on Mathletics which the children can then tackle independently. Teachers can then use the results to identify gaps.

### **Foundation Stage**

The Early Learning Goals have been adopted for children at the foundation stage. At this stage, pupils experience some mathematics on a daily basis. This early introduction to mathematics will generally be undertaken orally and often in the context of a class theme, e.g. a particular story. Wherever possible, opportunities for mathematics are exploited such as when taking the register. The school teaches maths in accordance with the National Curriculum 2014. The skills acquired in the numeracy lesson are applied across the curriculum. Mathematics lessons normally take place each morning. Teachers and adults use a range of questions and questioning techniques to develop mathematical thinking. Teaching strategies will be varied and will encourage a high level of interaction.

### **Homework**

Maths homework is a requirement throughout school in order to support and consolidate children's learning. Please read our homework policy for details about maths homework.

### **Learning Environment**

The school aims to provide a mathematically stimulating environment:

- through displays that promote mathematical thinking and discussion
- through displays of pupils' work that celebrate achievement
- by providing a good range of resources for teacher and pupil use. In every classroom, resources such as number lines, hundred squares, place value charts and multiplication squares are displayed as appropriate and used as resources for whole class or individual work.

### **Curriculum Planning**

The school uses the Archimedes hub mixed-age, long-term planning as the basis for their lessons. Teachers' planning ensures that learning outcomes are matched against age-related expectations and some teaching objectives may be drawn from the year below and/or above where appropriate.

### **Weekly Planning**

- Using the agreed format for weekly planning, teachers write plans for their maths lessons. These are made available in RMUnify.
- Teachers make amendments to plans according to their assessments of pupil progress.
- Teachers evaluate their weekly planning, making notes on pupils who have exceeded or not achieved expectations.
- Planning clearly shows which group the teacher will be focusing on each day and which group will be supported by the teaching assistant.

### **Differentiation**

In general, teachers plan a core activity for the majority of pupils and adjust the activity to make it appropriate for more able and less able pupils by the use of:

- teaching assistants



- additional resources and extension activities
- targeted questioning
- open questions

### **Special Educational Needs**

- All pupils take part in the daily maths lesson.
- Teachers plan lessons so that all pupils can be included and can make progress in the lesson.
- In oral work teachers plan a range of differentiated questions, with some targeted at specific pupils.
- Teachers also ask open questions that allow all children to take part.
- Teachers use a wide range of visual resources to illuminate meaning.
- During whole class teaching, discreet help is given to particular children by teaching assistants where available.
- During activities, children are supported by teaching assistants where available.

Please read our SEND policy for further details.

### **Marking**

All work is marked. Written feedback provides pupils with guidance on how to improve their work and provides challenges to deepen learning; challenges to which pupils respond in their purple pen.

Please read our Marking Policy for further details.

## **IMPACT**

### **Assessment**

Assessment is regarded as an integral part of teaching and learning and is a continuous process.

Assessment is carried out:

- orally through questioning.
- by observation of children at work.
- marking of children's work.
- through planned assessment activities linked to the key objectives.

Informal assessment takes place continuously and teachers annotate planning to summarise their assessments.

Teachers make and record an end-of-year assessment, judging whether or not an individual child has met the expected standard for their age.

### **Target Setting**

- Analysis of children's performance in tests helps the school to identify and set curricular targets for groups of pupils.
- School targets are set for pupil attainment for the end of Key Stage.
- Optional tests are used to help set end of Key Stage targets.

### **Reporting Procedures**

Annual reports to parents include comments on:

- Pupil progress
- Pupil attainment
- Pupil effort and attitude



**The BAWB Federation  
Bainbridge, Askrigg, and West Burton Primary Schools**

*Mid-Dale Excellence in Education*

Executive Headteacher: Miss Charlotte L. Harper

The maths lead also gives a written report to governors on a termly basis, presenting it in person at the end of an academic year.



## **LEADERSHIP OF MATHEMATICS**

### **Role of the Headteacher**

- Lead, manage and monitor the implementation of the curriculum, including teaching and learning (which includes weekly / unit planning).
- With the governors, keep the governing body informed about the progress of the curriculum.
- Ensure that mathematics remains a high profile in the school's development work.
- Deploy support staff to maximise support for the curriculum.

### **Role of the subject leader**

The mathematics leader is responsible for leading the development of mathematics through the school by:

- Ensuring that teachers are familiar with the curriculum
- Lead by example in the way they teach in their own classrooms
- Prepare, organise and lead training, with the support of the headteacher
- Support the headteacher in carrying out an annual audit and action plan with staff and governors
- Work co-operatively with the SENCO in providing advice and support for staff
- Observe colleagues teaching on a termly basis, with a view to identifying the support they need
- Attend training and network meetings provided by LEA maths consultants and advisors.
- Work alongside the headteacher in planning, organising and leading events for parents about the curriculum and our policies
- Discuss regularly with the headteacher and governors the progress of implementing the curriculum
- Report on achievement and the quality of teaching and learning through careful data analysis and thorough monitoring

### **Role of the class teacher**

- To ensure progression in maths in line with the new curriculum
- To develop and update skills, knowledge and understanding of mathematics
- To identify inset needs in mathematics and take advantage of training opportunities
- To keep appropriate on-going records
- To plan effectively for mathematics (with year group partners), liaising with manager when necessary
- To inform parents of pupils' progress, achievements and attainment

### **Role of Governing Body**

- To monitor the effective leadership of mathematics across all three schools through the rigorous monitoring schedule
- To report back to the curriculum committee on a regular basis.