ALDERMAN RICHARD HALLAM PRIMARY SCHOOL

Mathematics Policy

Policy Reviewed: September 2025

'Educating a community of life-long learners'

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Mathematics Policy

Introduction

Our school vision: Pupils will leave A.R.H. as happy, healthy and inspired young people who can confidently participate in the world as resilient, articulate citizens who have a life-long love of learning and discovery.

Our curriculum: Our curriculum is the vehicle to empower pupils with knowledge and skills. We strive to immerse young people in their topics which are designed to engage, provide real life links and progress all pupils' understanding.

'A.R.H. - Educating a community of life-long learners'

Aims

Mathematics helps children to make sense of the world around them through developing their ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

At Alderman Richard Hallam Primary School we aim to:

- develop a positive attitude to maths. as an interesting and attractive subject in which all children gain some success and pleasure;
- develop mathematical understanding through systematic direct teaching of appropriate learning objectives;
- encourage the effective use of maths. as a tool in a wide range of activities within school and, subsequently, adult life;
- develop an ability in the children to express themselves fluently, to talk about the subject with assurance, using correct mathematical language and vocabulary
- develop an appreciation of relationships within maths;
- develop ability to think clearly and logically with independence of thought and flexibility of mind;
- develop mathematical skills and knowledge and quick recall of basic facts in line with the National Curriculum

Teaching of Mathematics

Each child at A.R.H. will receive quality first teaching for at least an hour a day in KS1 and KS2. Efforts will be made to make cross curricular links where possible. 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 – such as through group work, guided work, open-ended problems and scaffolded activities. We use teaching assistants where possible to provide appropriate support to individuals or to groups of pupils including through pupil conferencing.

Foundation Stage

Work undertaken within the Foundation Stage is guided by the requirements and recommendations set out in the Early Years Foundation Stage document. We give all the children ample opportunity to develop their understanding of mathematics. We aim to do this through varied activities that allow them to use, enjoy, explore, practise and talk confidently about mathematics.

Key Stage 1

Lessons taught in Key Stage 1 are guided by the National Curriculum and are taught in units using the AET long term planning documents. These units contain approximately eight key learning steps which form the basis of the lessons over the course of the two-weekly unit. In Year 1, the first half term is spent focusing on key skills before the first unit is started in the second half term. In Year 2, the units are taught alongside assessing children against the ITAF statements for the end of KS1. The focus in KS1 is on building fluency and conceptual understanding at a deeper level and mastering the objectives set out by the National Curriculum.

Key Stage 2

Lessons taught in Key Stage 2 are guided by the National Curriculum and are taught in units using the AET long term planning documents. These units contain key learning steps which form the basis of the lessons over the course of the two-weekly unit. In Years 3-6, children work through the units which continue to build a deeper understanding, ready for the KS2 S.A.Ts at the end of Year 6. The focus in KS2 is on consolidating fluency and conceptual understanding at a deeper level, developing stronger reasoning skills and mastering the objectives set out by the National Curriculum.

What is the progression? How is this monitored?

Progression of key skills in Mathematics is set out in the National Curriculum for yearly progression and the AET Curriculum for progression over a particular year group. This is monitored through the administration of termly assessments which is used to update assessment judgements on Arbor as well as regular planning audits to monitor how lessons are being taught throughout the year.

How do you ensure thorough links to the national curriculum?

Key learning steps in units taught are based on and linked to National Curriculum objectives.

Responsibilities and Roles

The Headteacher and Governing Body have overall responsibility for Mathematics, supported by the Mathematics Coordinators.
The Mathematics Coordinators are responsible for overseeing the delivery of the Mathematics Curriculum through:

- Liaising with year groups on the planning and delivery of lessons
- Providing regular Inset and staff training opportunities for teachers and teaching assistants.
- Monitoring planning to ensure curriculum coverage.
- Carrying out planning scrutinies to ensure learning opportunities are optimised.
- Observing learning and teaching to ensure progress is being made within units through learning walks.
- Regular reviews of the curriculum through staff and pupil questionnaires and open dialogue.
- Speaking with the pupils about their learning.
- Assessing attainment and progress in Mathematics across the school.

All teaching staff are responsible for:

- Planning and delivering the curriculum on a day-to-day basis and for making cross-curricular links where appropriate, using the route way. Consistency is ensured by using the AET curriculum document and through year group planning.
- Making amendments to planning in order to optimise learning opportunities when they arise based on feedback from lessons.
- Ensuring there is appropriate challenge and scaffolds so all pupils make good progress and can access learning opportunities.
- Using a range of practical resources as much as possible.
- Ensuring the curriculum is taught in an engaging manner which is in-line with the school ethos.

Planning

We ensure that all objectives in the National Curriculum are covered through the AET curriculum long term plan. Our planning process for Mathematics is:

- Long term plans for the year; these are the units that will be taught throughout the year. They give a number of lessons/weeks for the duration of the unit.
- Medium term plans for each unit hold the relevant learning steps and National Curriculum objectives. These highlight the skills to be covered and are assessed at the end of each half term. Teachers use the National Curriculum objectives and AET learning steps to discuss how they will translate these into meaningful activities for the children. This is planned on our Routeway format. On each section of the routeway, the links to the National Curriculum are clearly labelled. Using the Routeway, teachers then consider what will be the best learning sequence for their pupils. This has to incorporate: a formative assessment of children's understanding, what the learning outcome will be and regular practice of skills in their Mathematics books. Parents are informed of the upcoming units and skills through a Parent and Carer Letter. This allows parents and carers to support their children and become involved in their learning.
- Year Groups meet weekly to plan the subsequent weeks work from the medium term plan or routeway. Each weekly plan and flipchart is clearly laid out to ensure all pupils can access the learning with a clear learning outcome. Lessons are engaging and taught using high quality resources, focusing on fluency, reasoning and problem solving. There is clear modelling and regular opportunities for children to show their understanding through the use of mini whiteboards.
- Plans are monitored by SMT and the Mathematics Coordinator.
- There are two mathematics weeks each year which will take the form of retrieval practice. These weeks allow children to recap and review what they have been learning in Mathematics through practical, engaging and creative activities.

Inclusion

It is expected that all children will be given the opportunity to learn in a creative and encouraging learning environment which encompasses a range of learning and teaching styles. All children are entitled to this as part of the school ethos. It is hoped that this approach will motivate and support children's learning at all levels including the Able and Talented, EAL and children identified with a Special Educational Need (SEND).

SEND

Teachers will aim to include all pupils fully in their daily mathematics lessons. All children benefit from the emphasis on oral and mental work and participation in watching and listening to other children demonstrating and explaining their methods. Children will receive scaffolded work where needed and focused group teaching with the teacher and TA where possible. However, a pupil whose difficulties are severe or complex may need to be supported with an individualised programme in the main part of the lesson. Pupils may receive interventions for Mathematics or pupil conferencing when it is needed. These are tracked through Provision Map.

Gifted, More Able and Talented (GAT)

Appropriate strategies will be employed for GAT pupils including, but not limited to, problem solving related to the area of learning, challenge boxes in classrooms, leading plenaries to share their learning and extension activities. Further reference should be made to the GAT policy and our Expert initiative.

Assessment

Whole class feedback is used in Mathematics lesson to provide timely, verbal feedback to pupils. Staff identify strengths and misconceptions during and after lessons and respond as needed. This could take the form of targeted support for individual pupils, adapted lessons or future focuses for morning work. This is recorded on feedback sheets and shared with pupils as appropriate. In Mathematics lessons work can be live marked, self-assessed and peer-assessed, which gives pupils additional feedback to support them in identifying their own strengths and areas for development.

The children will be assessed against formative statements on Arbor, which are in line with the curriculum, regularly throughout the year through teacher assessments. Formative assessments will take place every two weeks in the form of a short test such as assertive mentoring or an arithmetic test. When completing an assertive mentoring test, children will complete it in a variety of ways as appropriate for their age group: independently, in small groups or as a whole class. The information will then be recorded on Arbor where appropriate so that it can be analysed and next steps identified during pupil progress meetings. Towards the end of each term an assessment will be made to review pupil's progress and attainment. These will be made through compulsory National Curriculum mathematics tests for pupils in 6. Teachers will put these assessment findings onto Arbor; this information will then be reported to the senior leadership team and the child's next teacher.

Targets

Children from Y1-6 have a set of targets given to them at the beginning of the year which can be found in the back of their Mathematics books. These targets focus on the number objectives from the National Curriculum to ensure development of key skills. Throughout the year, these targets will be updated by staff and/or pupils as a record of what they have achieved during the units. These are dated (where appropriate) and ticked/stamped and can be updated following Assertive Mentoring tests, termly tests, work in class or group work. Targets will be updated every half term as a minimum and they will then be used to inform future planning and/or intervention work.

Monitoring and Review

Monitoring and review takes place on a regular basis in accordance with the School Improvement Plan and the Mathematics Action Plan.

- Learning walks may be carried out during the year by the Mathematics co-ordinators to observe children consolidating their learning. Feedback from any learning walks is given in writing to year group leaders and SLT.
- The Mathematics Co-ordinators carry out planning scrutinies through the year and feedback to year groups their strengths and areas for improvement. This feedback is given in writing to teaching staff. These audits inform PDMs and any spotlight focuses to support staff in the teaching of Mathematics.
- Pupils are conferenced regularly about their Maths. lessons. The information the children provide informs PDMs and is fed back to staff where needed.

To be reviewed September 2026