

Maths Policy

Aims - Our Intent

At Ashurst Church of England Aided Primary School, we believe mathematics is an important part of children's development throughout school, right from an early age. We intend on delivering a curriculum which:

- Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics following a mastery curriculum approach.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
- Recognises that mathematics underpins much of our daily lives and therefore is of paramount importance in order that children aspire and become successful in the next stages of their learning.
- Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential, as they belong to our school community.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Provides equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).
- Is in line with the expectations in the National Curriculum 2014

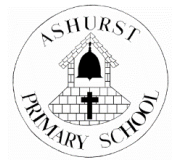
Teaching and Learning Approaches - Our Implementation

Concrete / pictorial / abstract

Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6.

- In school, we follow the national curriculum and also use Numicon teaching resources to support planning and assessment.
- The calculation policy is used within school to ensure a consistent approach to teaching the four operations over time.
- At the start of each new topic, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses.
- All lessons begin with a short assessment to support retrieval practice and develop long-term memory.
- Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts. The mastery approach incorporates using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

Ashurst Church of England Aided Primary School



- Children work on the objective at whatever entrance stage they are assessed as being at. Children can acquire the skill, apply the skill or deepen the skill within the lesson.
- Children who have shown their understanding at a deep level within the unit, will have opportunities to apply these skills in a greater depth activity. This should be challenging and ensure that children are using more than just one skill to be able to answer the mathematical problems.
- Reasoning and problem solving are integral to developing the children's mathematical thinking.
- A love of maths is encouraged throughout school via links with others subjects, applying an ever-growing range of skills with growing independence.

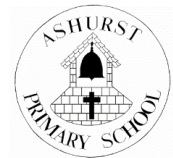
EYFS

Mathematics within the EYFS is developed through purposeful, play based experiences and will be represented throughout the indoor and outdoor provision. The learning will be based on pupil's interests and current themes and will focus on the expectations from Development Matters / Early Years Outcomes. Mathematical understanding can be developed through stories, songs, games, imaginative play, child-initiated learning and structured teaching. As pupils progress, they will be encouraged to record their mathematical thinking in a more formal way.

Key Stage 1 Maths.

The principal focus of mathematics teaching in key stage 1 is to ensure pupils develop confidence and mental fluency. Through a mastery approach we aim to build a deep understanding so that future learning continues to build on solid foundations. Practical activities and resources offer the children the opportunity to consolidate and develop a deeper mathematical understanding of more complex concepts. Throughout Key Stage 1, it is important that children gain a secure knowledge of number and place value and become confident when using the four operations in both formal methods as well as problem solving where often the approach is not immediately evident. Children will learn to identify fractions using shapes, objects and quantities and make connections to equal sharing and grouping. They will use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money and are expected to use related vocabulary for all topics.

Ashurst Church of England Aided Primary School



Lower Key Stage 2 - Years 3-4.

The principal focus of mathematics teaching in lower Key Stage 2 is to ensure that children become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. At this stage, children continue to develop their ability to solve a range of problems, including with simple fractions and decimal place value. Children develop accuracy in measuring and converting between measures. They embed the skills to analyse shapes and their properties, and confidently describe the relationships between them. By the end of Year 4, children should have memorised their multiplication tables up to and including the 12-multiplication table and show precision and fluency in their work.

Upper Key Stage 2 - Years 5-6

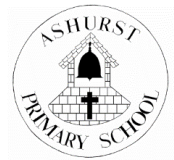
The principal focus of mathematics teaching in upper Key Stage 2 is to ensure that children extend their understanding of the number system and place value to include larger integers. This develops the connections that children make between multiplication and division with fractions, decimals, percentages and ratio. At this stage, children build on their previous learning and develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, children are introduced to the language of algebra as a means for solving a variety of problems. Learning in geometry and measures consolidates and extends knowledge developed in number. Children also classify shapes with increasingly complex geometric properties and use the vocabulary they need to describe them. By the end of Year 6, children should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

SEND Provision and Equal Opportunities

There are children of differing ability at Ashurst. 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.

Children identified as needing extra support in Maths will be given appropriate help to access the curriculum in the classroom. Planning in Maths takes into account the targets set for individual children in their Individual Support Plans (ISPs). Their learning will be supported and incorporate specific approaches to enable them to learn, make progress and be successful. Children will be provided with challenges matched to their needs through a range of teaching strategies including:

Ashurst Church of England Aided Primary School



- using texts that children can read and understand
- using visual and written materials in different fonts and colours
- using different coloured overlays
- using ICT, other technological aids and taped materials
- using alternative communication such as signs and symbols

Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant support as necessary. For those children who are working outside of the year group curriculum, individual learning activities are provided to ensure their progress.

In line with the School's Inclusion Policy each child has an equal entitlement to all aspects of the Maths curriculum and to experience the full range of Maths activities. Therefore, in teaching Maths, care will be taken to ensure that all learning needs are met to ensure all children keep up with the learning and catch up needs are also met. Intervention groups will take place both within the Maths lesson and outside of it. These sessions may be led by the teacher or teaching assistant and may involve individual or small group work and may include extending the most able mathematicians as well as supporting learners who require additional practise of skills.

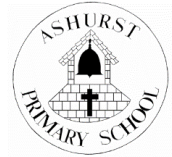
Ashurst CE Aided Primary School, has universal ambitions for every child, whatever their background or circumstances. Children learn and thrive when they are healthy, safe and engaged. In order to engage all children cultural diversity, home languages, gender and religious beliefs are all celebrated. Our curriculum includes a wide range of resources which represent the diversity and backgrounds of all our children

Outcomes - Our Impact

Mental maths activities will be carried out regularly throughout the whole of Key Stage 1 and Key Stage 2 to improve children's mental agility. Times Tables will also be tested weekly. Children are provided with feedback either verbally or through written marking in line with the school's marking policy. Same day intervention takes place in lessons enabling all children to make progress. Often, in order to clarify understanding of a concept, children will be asked to respond to feedback, this is completed by the children at the beginning of the next lesson.

- Children demonstrate a quick recall of facts and procedures. This includes the recollection of the times table.
- Children show confidence in believing that they will achieve.
- Each child achieves objectives (expected standard) for year group.

Ashurst Church of England Aided Primary School



- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children show a high level of pride in the presentation and understanding of the work.

Cultural capital

At Ashurst we aim to support every child to gain the confidence and the ability to understand and contribute to a varied cultural awareness.

We believe that taking children's learning experiences beyond what they already know is a fundamental part of becoming an educated citizen in society.

Maths contributes to this through

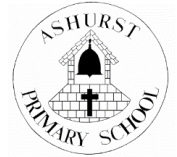
Resources

A range of maths resources are in individual classrooms and the resources cupboard.

The role of the Mathematics Subject Leader:

- Prioritise improvements for the teaching and learning of mathematics across the school and contribute to the school improvement plan, in consultation with the Headteacher and Governing Body, driving forward the improvement of mathematics teaching and progress and achievement of learners.
- Track the progress of identified groups of children and be involved in a thorough evaluation of Mathematics looking at trends over time, value added from baseline predictions to end of Key Stage Assessment results and report findings to the Headteacher and Governing Body.
- Audit provision for mathematics across the school in terms of teaching and learning, resources, standards on a regular basis
- Lead regular insets and CPD activities to support staff in developing areas of mathematics where they feel less confident
- Support teachers and learners in delivery of the 'hard to teach, hard to learn' areas of mathematics
- Provide 'expertise' to assist staff in the delivery of the curriculum
- Know and understand how children become numerate and communicative
- Keep updated in Mathematical developments through appropriate in-service training
- Evaluate on a regular basis the policy and scheme of work to ensure they form the basis of practice of Mathematics within the school

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- Ensure that appropriate resources are available to ensure children are able to learn with a hands-on concrete approach.

Monitoring and Evaluation

This policy will be reviewed by the Maths subject leader, in consultation with the staff, and Headteacher as and when elements of Maths are identified or prioritised within the School Development Plan.

Assessment:

All children are tracked using the in-school tracking system. After each unit of work, class teachers assess children based on their mathematical skills, knowledge and understanding linked to the objectives in the National Curriculum.

This policy was adopted in: September 2023

The policy is to be reviewed in: September 2024