

## **Maths Subject Intent Statement**

Curious	Caring	Creative	Courageous
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Having fun, learning together.
Curious, caring, creative and courageous.

At Archibald First School, our intent for mathematics is to teach a rich, balanced and progressive curriculum using Maths to reason, problem solve and develop fluent conceptual understanding in each mathematical area. It is our school vision, that all our children leave Archibald as curious, caring, creative and courageous learners ready for the next phase of their lives and to explore their world further. We believe that mathematics is a fundamental part of children's development throughout school, right from an early age. We intend on delivering a curriculum which:

- Allows children to be part of creative and engaging lessons that will give them a broad range of opportunities to explore mathematics following a progressive and creative curriculum.
- Allows children to be curious and better make sense of the world around them, relating the patterns between mathematics and everyday life.
- Gives each child the **courage** to believe in themselves as mathematicians and to 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 that our children aspire and become successful in the next stages of their learning.
- Engages all children, regardless of their starting points, and entitles them to the same
  quality of teaching and learning opportunities, striving to achieve their potential, as they
  belong to our school and wider community.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Provides equal opportunities for all children to apply their mathematical knowledge to other subjects (make cross-curricular links).
- Is in line with the expectations in the National Curriculum 2014
- Maps mathematics across the school to show clear progression in line with age related expectations using the White Rose materials as starting points for planning, resourcing and learning.
- Challenges pupils; we believe in a child-led approach whereby pupils can take
  responsibility of their learning. Pupils identified as SEND, PP, EAL or those with any
  additional needs are supported fully, revisiting or being stretched and challenged their
  learning where necessary.
- Ensures that children are 'middle school ready'; that is, they are well prepared and ready for the next stage of their learning

Our 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 Y4.

## **Teaching and Learning, Content and Sequence**

- In school, we follow the national curriculum and use White Rose Schemes of Work as a guide to support teachers with their planning and assessment.
- The calculation and CPA 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.
- Most lessons begin with a short recap of learning from a previous unit ('Flashback') 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.
- 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 move through the different stages of their learning at their own pace.
- Children who have shown their understanding at a deep level within the unit, will have
  opportunities to apply these skills in a 'challenge' and 'Dong Nao Jin' activity. This should
  encourage the children to deepen their understanding, be creative in their approach 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 the activities children are given to develop their mathematical thinking and are embedded within every lesson.
- Resources are readily available to assist demonstration of securing a conceptual understanding of the different skills appropriate for each year group.
- Children are encouraged to explore, apply and evaluate their mathematical approach during investigations to develop a deeper understanding when solving different problems / puzzles.
- A love of maths is encouraged throughout school via links with others subjects, applying an ever growing range of skills with growing independence.
- Children with additional needs (SEND, EAL) and those who may be disadvantaged (FSM, PP) 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.

## Leadership, Assessment and Feedback

• All children are given the opportunities to work on the objectives of the year group that they are currently in. Assessment informs the teaching and learning sequence, if children

are assessed at working at a level which does not match their current year group they will be given extra support and intervention alongside class teaching. If needed, learners are given small group, 1-2-1 and/or timetabled intervention in order to ensure every child is reaching their full mathematical potential.

- Pre-teaching and same day intervention may be used where necessary to ensure that gaps between children who are not keeping up and those who are 'on track' close.
- Feedback is given on children's learning in line with our feedback and marking policy. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through planned questioning or additional activities.
- Formative assessment is incredibly important at AFS where we focus on challenge questions, analysis of learning, extension work, mini plenaries and discussion with peers. There is coherent progression seen in planning within each unit and build upon activities in EYFS

The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with SLT, key data is analysed and regular feedback is provided, to inform on progress and future actions.

The impact of our mathematics curriculum is that children understand the relevance of what they are learning in relation to real world concepts. We have fostered an environment where Maths is fun and it is OK to be 'wrong' because the journey to finding an answer is most important. Our children have a growth mind-set and they make measurable progression against their own targets.

Our maths books, floor books and evidence on Tapestry and Twitter show a wide range of activities evidencing fluency, reasoning and problem solving. Children demonstrate a quick recall of facts and procedures. This includes the recollection of the times table. Our feedback and interventions are supporting children to strive to be the best mathematicians they can be ensuring the vast majority of children are on track.

Children have the courage to believe they will achieve. They 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. They have the flexibility and fluidity to move between different contexts and representations of maths. Children are developing skills in being articulate and are able to verbally, pictorially and in written form reason well. They can independently apply the concept to new problems in unfamiliar situations.

Our school standards are high and children take pride in their work. We moderate our books both internally and externally, children are achieving exceptionally well and are prepared for the move into middle school.

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