

Maths at Poppyfield Primary Academy

At Poppyfield Primary Academy, we believe that we can foster children's mathematical understanding by helping them to develop a resilient, skilled and confident approach to all areas. We hope that all children will succeed as mathematicians by embracing mistakes as opportunities.

Overview:

- Mathematics at our school is based on the National Curriculum for Mathematics (Department for Education, 2014) for year groups 1 to 6.
- The Early Years Foundation Stage Framework (DfE, 2014) informs mathematical learning in the Early Years Foundation Stage.
- The programmes of study are used to give a balanced and broad curriculum to all of our pupils; this includes the statutory and non-statutory aspects of the curriculum and EYFS framework.

Aims

We aim to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- can **solve** problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Through fluency, reasoning and problem solving, we believe that children can access a mastery curriculum.

Daily lessons in KS1/KS2:

- All lessons should be planned for each week using the weekly planning sheet. All lessons should follow the same structure so that the children know what is expected of them – reasoning, fluency, application.
- Arithmetic should be taught daily, but this does not need to be part of the lesson and recorded in the back of maths books.
- Tough Tens should be given to the children each week and stuck in the children's arithmetic books so that it can be shared with parents.

 Reasoning Fluency Application

Assessment:

- Assessment for learning should occur throughout the lesson, enabling teachers and teaching assistants to adapt their teaching/input to meet the children's needs. This feedback should be incisive and regular.
- Children should be given the opportunity to self-assess against learning objectives and success criteria, giving them a sense of success at least once a week.
- Pupil's work should be marked in line with the Marking Policy and teachers should model how corrections should be made, giving children a chance to learn from their misconceptions or incorrect methods.
- Termly assessments are completed for each year group to assess where the children are in their learning. Assessments are taken from Rising Stars which correlates with the White Rose scheme of learning.
- Children will undertake the end of KS1 SATs assessment in the spring term of year 2.
- Children will undertake the end of KS2 SATs statutory assessment in the spring term of year 6.
- Children in year 4 will take the statutory multiplication tables check in the summer term.

SEND:

Pupils should have access to a broad and balanced curriculum. The National Curriculum Inclusion Statement states that teachers should set high expectations for every pupil, whatever their prior attainment. Teachers should use appropriate assessment to set targets which are deliberately ambitious. Potential areas of difficulty should be identified and addressed at the outset. Lessons should be planned to address potential areas of difficulty and to remove barriers to pupil achievement. In many cases, such planning will mean that pupils with SEN and disabilities will be able to study the full national curriculum. The guidance in this document will support planning for all SEND pupils by highlighting the most important concepts within the national curriculum so that teaching and targeted support can be weighted towards these. Children with SEND should have tailored maths lessons and the correct support to enable them to succeed in each lesson.

EYFS:

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes. (DfE, 2014)

Resources and Displays:

- Each classroom will have a dedicated Maths station that is resourced with materials to support the learning of pupils. These resources may include place value counters, dienes, number lines, numicon and string beads. All children are encouraged to use resources to enable them to succeed in their lesson.
- All classrooms should have a working wall dedicated display dedicated to Maths that include headings such as: WALT, teacher WAGOLL, pupil WAGOLL, Big Picture, Vocabulary and Success Criteria

Timestables:

We teach times tables using the following progression:

Year 1 – Be able to count in multiples of twos, fives and tens.

Year 2 - Be able to recall 2, 5 and 10 multiplication and division facts.

Year 3 - Be able to recall 3, 4 and 8 multiplication and division facts.

Year 4 - Be able to recall 6, 7 and 9 multiplication and division facts.

Year 5/6 - application of multiplication and division facts to problem solving.

Homework:

As a school, we encourage parents to support their children at home with their:

-weekly 'tough tens'

-times table practise

-number bonds

-TT Rockstars

-Numbots