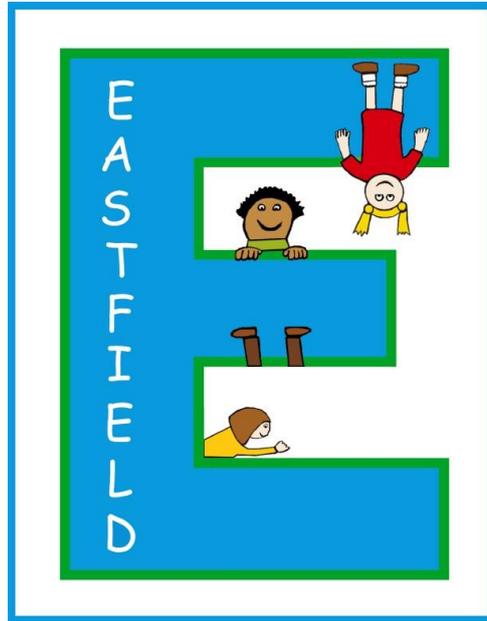




Eastfield Primary School



Mathematics September 2021



Our Vision

At Eastfield, we teach maths to all children, whatever their ability and individual needs. Through our maths teaching, we provide learning opportunities that enable all pupils to make good or accelerated progress. We strive to meet the needs of all pupils and we take all reasonable steps to achieve this. During a child's mathematical journey at Eastfield, they develop a deep and conceptual understanding through a high-quality mathematics curriculum. Where possible, links have been made to other subjects.

We want children to:

1. Be fluent; perform mathematical problems accurately and quickly reflecting on the method they have chosen.
2. Reason mathematically; make generalisations, develop an argument or justifications to share their thinking.
3. Solve problems by applying their mathematical knowledge with increasing confidence.

We provide opportunities for children to recognise the importance of maths in the wider world to ensure that they can apply their skills in a range of different contexts. We want all children to leave our school with a passion and positive mindset for the subject.

Implementation of Mathematics

Foundation

Early Mathematical Understanding (EMU) is taught daily for 20 minutes. Teachers create a weekly plan, and each lesson includes, counting, recap on prior learning and new learning. Teachers use a range of manipulatives to embed understanding. Teachers unpick the 'numberness' of number, during EMU, and display these around the classroom. Children will also take part in one focused maths day allowing them to learn specific new skills and embed them across the week in a range of areas.

Year 1 – 6

The school has recently embraced a 'Mastery' approach in Mathematics and year 1 and 2 will be embedding this into the academic year 2021– 2022 and years 3 – 6 will be developing the approach. Teaching for Mastery's five big ideas are as follows: fluency, mathematical thinking, representation and structure and variation; coherence (small steps) are a running thread throughout.

Therefore, as a school we ensure we teach in small steps to allow a strong and secure understanding of mathematical concepts that children can confidently reason and problem solve with accordingly.

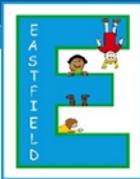
Planning

We carry out curriculum planning in mathematics in three phases (long-term, medium-term and short-term).

Our LTP, details the order in which our units should be taught. Most areas in Mathematics are interlinked, therefore not all areas appear on the LTP; links have been made where possible.

The MTP has been written by the Maths Lead (Mrs Lebbon) and cross references the teaching steps as outlined in the NCTEM PD materials to ensure a consistent approach across school. Teachers are currently using the Professional Development materials, from the NCTEM, to plan small coherent steps in the STP and to improve their own subject knowledge.

STP is carried out by teachers using PowerPoint, Smart Notebook or a paper plan. Teachers will plan their lessons according to the small steps explained in the PD materials (NCTEM). Teachers will consistently use manipulatives and mathematical talk to embed children's understanding. This will ensure that all children get the opportunity to reach their potential. The mathematical strategies taught are highlighted in the school's Calculation Policy.



Daily Learning

Lessons start with a clear WALT (we are learning to) and WILF (what I'm looking for) for the lesson. Children will reflect on their learning from the day before, this will be the starting block for the new learning. Adults will model the learning using a variety of manipulatives and will continually ask open questions throughout to embed understanding.

Children will be exposed to challenges (independent learning tasks) during the lesson, this will vary due to the children's understanding or the new learning that is taking place. Adults will consistently use assessment for learning.

Adults will model the correct use of mathematical language and encourage pupils to use this throughout every lesson. The terminology and examples will be displayed clearly on working walls in classrooms. This ensures that displays stay relevant.

All children will be taught the same, excluding the children who have specific needs in maths. Adults will pre-teach children who struggle with a specific area, for instance, if the learning is area, the pre-teach will be around multiplication or addition, not the focus of the learning.

All classes have an extra adult in their classroom. These adults will primarily target pupil premium children to ensure that the attainment gap closes.

All children will sit in mixed ability seats, with exception to those children with specific needs. This encourages peer support for some and allows all children to discuss mathematical strategies, therefore embedding their understanding. Children will be challenged through key questioning by adults; therefore, differentiation is mainly achieved through outcome.

Displays

Teachers have a maths-working wall for their classroom display. Teachers use it as a reference whilst teaching and pupils should find it useful when working on maths activities, consequently the working wall should always be amended and adapted according to the learning taking place in the classroom. All classrooms have a set of headings to use when displaying prompts and / or key mathematical language on the display board. Vocabulary and methods are added to the display when children are taught about the topic. The headings reinforce our calculation policy and our approach to teaching mathematics (concrete, pictorial and abstract).

Please refer to the display policy for further information.

Fluency

Children in year 1 and year 2, complete 55 facts (number bonds to 20) for them to become quicker at recalling their number bonds to 20. The expectation is that children's scores will improve weekly.

To aid fluency, children, in year 3 upwards, get tested weekly on their times tables, appropriate to their learning needs / year group. This is provided by TTRockstars.

Resources (including online)

There are a range of resources to support the teaching of maths across the school. All classrooms have a wide range of appropriate concrete resources. ALL children should have access to these resources to become fluent in a mathematical concept. All other larger mathematical resources (such as weighing scales, shapes, metre sticks etc.) are available upstairs from a central resources room.

Children in years 1 – 6 will have access to 'Mathletics' for use in the classroom to reinforce mathematical knowledge and understanding. Teachers may use Mathletics for the year group's online homework for that week. This should reflect the skills taught that week (see the homework policy).

In addition, children in years 4 – 6 have access to 'TTRockstars'. Teachers use this resource during school hours to reinforce quick recall of their times tables and children will access this at home too.



More detailed information concerning specific programs and their focus can be found in the school's Information and Communication Technology Policy. (See ELearning/Computing Policy).

Assessment

At Eastfield Primary we are continually assessing our pupils and recording their progress against the end of year expectations. We use assessment as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match work to the needs of the pupils, thus benefiting the pupils and ensuring progress. Assessment is carried out on three levels.

In short term, teachers will carry out continuous assessment of children's progress and daily lessons are adapted depending on the needs of the class. Such assessment will be formative: progress with specific skills or objectives will be assessed with a view to informing the teaching and learning subsequently appropriate for the children.

Each term teachers assess their class's progress as to whether they are 'on track to meet the end of year age related expectations/ EXS', 'Better than on track / GDS', 'Working towards / WTS' or 'below / BLW' against end of year expectations. At each of these points data is analysed to highlight areas of strength and weakness. Pupils making insufficient progress are identified as target groups, which is usually in the form of additional support sessions outside the daily lesson.

Years 2 and 6 also use National Tests. Foundation Stage assess using the Early Years Profile mathematical development statements.

Eastfield Primary School reports results and progress in mathematics to a number of agencies. End of Key Stage Assessments are reported to DfE and Wolverhampton LA and all assessments are shared with staff and governors of the school. Parents receive a detailed annual report on their child's progress in Maths.

Impact

The impact of a high – quality curriculum in maths is assessed through summative and formative assessment. Quality first teaching means that adults intervene quickly and assess the learning occurring in their classroom and make amendments.

We use internal data termly for teachers and leaders to reflect on every pupil. Children complete PUMA tests in the Summer term, these give adults a standardised score, this can support the teacher's judgement or create a professional discussion, with a member of SLT (senior leadership team), about the child's needs. Using this data, teachers make amendments to planning based on this and leaders may plan interventions if accelerated progress is needed.

As a school, we moderate children's work in house and with others in our local area. These professional discussions are vital for teachers and as a whole school.

All the above is monitored through lesson drop ins and during pupil progress meetings.

Equal Opportunities

At Eastfield Primary School we aim to ensure that:

- ❖ Our mathematics curriculum is relevant to all pupils irrespective of gender, race or different ability,
- ❖ All pupils have equal access to the whole range of experiences offered,
- ❖ All pupils receive equal teacher attention,
- ❖ Teachers have the same expectation of work habits irrespective of gender or race,
- ❖ Examples when setting mathematical problems and illustrations in textbooks are free from gender, culture or race stereotyping.

The school is committed to equality of opportunity and access. With regard to race, religion, colour, gender and disability, the individual needs of all children will be identified in order that access is guaranteed for all children in the school.

Please also see the school's Race Equality policy and the school's Equal Opportunities policy.



The role of Governors / Parents

Our Governors determine, support, monitor and review the school's policies.

We believe that parents have a fundamental role to play in helping their children learn and progress within our school and we are committed to ensuring that parents are informed about the topics we cover when homework is set and how their child is progressing. Regular parent's evenings through the year support this progress.

Eastfield believes that the active support and involvement of parents is crucial to children achieving their potential in Maths and in all aspects of the curriculum. There is recognition that the nature of the school's catchment is such that the school will need to reach out to parents and offer support to them in carrying out this role.

Parents are kept informed of strategies to calculate through the yearly parent's meeting for new parents of reception children and via the school website in the curriculum statement.

Parents will receive a detailed annual report on their child's progress in Maths.

Monitoring and review

The coordination and planning of the mathematics curriculum is the responsibility of the subject leader, who also:

- supports colleagues in their teaching, by keeping informed about current developments in mathematics, and by providing lead and direction for this subject,
- reviews evidence of the children's work and observes mathematics lessons across the school, with the focus depending on the priorities in the SIP,
- consults with the Head teacher on budget resources and asks staff for input or buying decisions to facilitate entitlement within a stimulating context,
- reviews and develops school policy in consultation with staff,
- identifies needs to put policy into practice,
- liaises with outside agencies to develop and update provision,
- informs and supports staff on school and national maths issues,
- identifies INSET needs,
- monitors and evaluates progression towards subject specific targets,
- monitors and evaluates pupil achievement and attainment and
- monitors the quality of learning and teaching – lesson observations, monitoring of weekly and medium-term planning and scrutiny of pupil's work.

The quality of teaching and learning in mathematics is monitored and evaluated by the Headteacher as part of the school's agreed cycle of lesson observations.

A named member of the school's governing body is briefed to oversee the teaching of maths. The maths governor meets regularly with the subject leader to review progress. The policy will be reviewed at least every two years.

Signed: _____

Signed Governors: _____

Date: _____

Staff Review: _____