**Why we believe Maths is important:**

At St Augustine’s Junior School, we understand the importance of providing an engaging and enjoyable mathematics learning journey for our pupils. We realise how important it is to equip pupils with the mathematical skills, tools and understanding they need to allow them to excel in a world where mathematics is so prevalent and surrounds us on a daily basis. We aspire to guide and support pupils in securing mathematical understanding in all mathematical subjects, giving them the confidence to apply their learning to real life contexts and other subjects with ease. We make every effort to ensure that all of our pupils achieve their potential in mathematics and do so in a fun, challenging, and thought-provoking way. We provide pupils with the skills they need to function in a numerical world, which will guide them on a path to success.

**Our Intention and Aims**

Our intention and aims are that pupils will be able to:

* Be confident in the skills and areas outlined in the ‘National Curriculum in England, Mathematics Programmes of Study. Key Stages 1 and 2 (2013, p3), which is available at: <https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study>
* Apply the calculation methods learnt in lessons (from our calculation policy-available on our school website) and be able to confidently apply these methods to arithmetic, quickly and proficiently.
* Understand the fluency of mathematics and be efficient in recalling number facts and times table facts and be able to apply this knowledge to other areas of mathematics and other subjects.
* Apply the underpinning principles of mathematics to problem solving and reasoning.
* Articulate answers in a way that uses mathematical vocabulary skillfully and which builds on previous learning.
* Use the fundamentals of mathematics to help pupils reason their answers and apply this to more difficult areas of mathematics.
* Be confident in paraphrasing problems into their own words and be able to identify the steps needed to solve the problem.
* Use the skills of resilience and perseverance in mathematics and apply this to all areas of mathematics.
* Support their thinking with calculation methods, visual representations to help them solve the problem.
* Link the mathematics they learn to real-life scenarios.

**How we Implement our Aims and Intent in Mathematics**

**The Planning of Mathematics Lessons**

Lessons are planned effectively so that there are opportunities for children to apply the fundamentals of mathematics to problem solving and reasoning style questions. Teachers plan mathematics lessons in line with the National curriculum (2013) and planning is discussed, shared and created by teachers, along with Subject Leaders. Planning is rigorously thought through by teachers in every year group, making sure that objectives from the curriculum are planned for and catered for in all mathematics lessons. Expectations are clear and identified by knowledgeable teachers and staff, with the outcomes clearly in mind for pupils’ progress.

At weekly teacher planning meetings:

* National Curriculum statements are discussed in Upper and Lower school teams, to decide on which learning objectives will be of focus in any given week.
* The structure, resources, outcomes and expectations of the lessons are clear for that week.
* Differentiation is clear for each lesson, with support in place for this differentiation.
* The key vocabulary that will need to be discussed in the mathematics lessons will be shared.
* The use of any resources (mathematical manipulatives) will be agreed for the lessons, if they are needed for the lessons.
* Key areas of mathematics, that need to be revisited in the following week’s lessons will also be discussed, with further additional lessons/interventions being decided upon for the following week, to ensure learning is secured and misconceptions are eradicated.

**Our Mathematics Lessons**

Lessons in mathematics are structured around learning questions. These learning questions are based around the learning criteria stipulated in The National Curriculum: ‘National Curriculum in England, Mathematics Programmes of Study. Key Stages 1 and 2 (2013) as cited above.

These learning questions are shared with the children in every lesson so that the focus of the lesson is clear. Lessons begin with daily arithmetic and mental math starters, which focus on number facts, times tables and instill mathematical vocabulary. The remainder of the lesson is split across fluency and then moves into problem solving and reasoning for every learning question. Our lessons also incorporate the teaching of mathematical vocabulary, so that pupils are confident in using and applying terminology in their reasoning and also so that they become a knowledgeable expert when talking about mathematics.

In lessons, pupils take part in independent work, where they can think for themselves and have the opportunity to work independently and challenge their own minds for themselves. In lessons, we also encourage the use of group work or paired work, allowing pupils to talk about and share their learning. Communication in mathematics is a vital skill to use and we model this as teachers in our mathematics lessons and we hope that in using effective communication (talking about, discussing and proving our answers, working through our problem solving steps verbally etc), pupils become confident in reasoning and expressing their understanding proficiently themselves.

**Differentiation in Mathematics.**

At St Augustine’s, we adopt an inclusive approach to mathematics. We understand that there will be groups of learners and individuals, who will find mathematics difficult for many reasons. It is our aim to:

* Make sure that mathematics is not a barrier for any child, regardless of any Special Educational Needs (SEN) or other needs. For those with SEN, adhering to advice and recommendations from the SEN Coordinator is always kept in mind by teachers and support staff, to ensure that pupils are able to strive to achieve their best and be proud of their achievements in mathematics. Where needed, teachers will consult with the relevant staff members, based on their expertise to make sure that all needs are catered for.
* Support EAL leaners in mathematics. Another group of learners, who may need further support in mathematics may be those who do not speak English as their first language (EAL). Again, we endeavour to make sure that EAL learners are challenged, enjoy learning, but are also supported in being able to make progress in their learning in mathematics. A lack of language understanding should not be a barrier to progressing in mathematics. Tools such as ICT, translation tools, mathematical vocabulary and a classroom that shares dialogue and communication to express answers are useful ways we support EAL learners.
* Offer support and guidance in lessons in various ways (T.A support, further intervention, group work, peer support, using electronic resources and manipulatives etc). All staff ensure that all learners are being challenged in mathematics.
* Ensure that all teachers receive continuing professional development (CPD)/ training regularly in school about how to move on learners in their mathematical understanding and how to deepen pupils’ understanding even further.

**How we measure Impact in Mathematics**

At St Augustine’s Junior School, we monitor and measure the impact of our mathematics provision through several ways. We use summative assessment meaning that we use tests. We also use formative assessment which means that we use assessment methods in the classroom such as Assessment for Learning. We constantly monitor and review the progress and attainment of pupils in mathematics. In doing so, this supports teachers in their planning of lessons and to know what the teacher needs to do to support the next steps in pupils’ learning. This ensures that children are receiving the very best support and challenge in mathematics.

**Summative Assessment**

Tests are given to pupils at regular intervals throughout the year. To view impact through these tests, we analyse the test scores and marks gained and are able to identify which areas of mathematics pupils need further support or guidance in. The information we receive from the outcome of the tests, allows teachers to prioritise any areas of mathematics that needs to be focussed on in class and which areas of mathematics may need further intervention in order for pupils to excel.

**Formative Assessment**

Not only do we use tests to inform us of the impact of our mathematics provision, we also use formative assessment. This includes: questioning, marking and feedback, observations in lessons, monitoring success criteria etc. By using formative assessment in mathematics, we able to analyse progress in lessons and over time. It also ensures that children are receiving the very best support and challenge in mathematics as we will tailor our lessons to support any gaps in knowledge that the pupils have.

**Marking and Feedback**

We pride ourselves on our marking and feedback in school for mathematics. It is important to teachers, support staff, children and parents and carers that progress in lessons is visible and clear and also that children know their targets and areas that they need to improve on in mathematics. Work is marked to a very high standard by staff because it benefits our learners, furthermore it helps to create dialogue in pupils’ books. In doing so, this dialogue supports learning, as well as moving learning on in a challenging way.

**Communicating with Parents about their Child’s learning.**

It is considered extremely important that parents and carers are informed about the ongoing progress and attainment of their child in mathematics. Throughout the year, parents are invited to Parents’ Evening and report cards are sent home to give the parents an overview of their child’s progress. At the end of KS2, in the summer term, parents receive their child’s SAT results, detailing how their child has performed in the Key Stage 2 SAT tests. They are also given teacher assessment for mathematics.In terms of supporting parents at home with calculation methods and in communicating the arithmetic methods we use in school, the calculation policy is available on the school website. Year 6 parents are also invited to a Parent Information Evening each year, to learn about the expectations in mathematics for Key Stage 2 and to discuss and learn about the KS2 SATs and how they are administered.

**Monitoring and Review**

In mathematics, monitoring and review of teaching and learning is an ongoing process and this monitoring and review helps to assess the impact of our mathematics provision. The teaching of mathematics is overseen by the Maths Leader (Miss Wilkinson) and also members of Senior Management. The quality of teaching and learning is assessed by:

· Observations

· Snapshots

· Book looks

· Monitoring marking and feedback

· Pupil progress reviews

· Reviewing performance of year groups’ mathematics scores in regular mathematics tests (weekly, half termly, termly).

· Discussing with pupils about their learning in mathematics.

· Continual CPD for staff and teachers in mathematics, regularly throughout the year.

· Governor walks.