Rushwick C of E Primary School

Ask, Seek, Knock

Ask and it will be given to you; seek and you will find; knock and the door will be opened to you. Matthew 7:7.

Maths Curriculum Policy

Last reviewed on:	November 2023
Next review due by:	Summer 2025

Rushwick C.E. Primary School
Maths at Rushwick

Vision:

'Ask, Seek, Knock'

Ask and it will be given to you; seek and you will find; knock and the door will be opened to you. Matthew 7 Verse 7.

Inspired by the teachings of Jesus and recognising each person as a unique child of God, we work for the common good of everyone, ensuring our door is open for all to flourish. We encourage all to thoughtfully ask, graciously seek and courageously knock, so that together we can make a difference to our Rushwick School family and the wider world.

Our School Values

Respect	We treat all others with respect. Being respectful is reflected in the courtesy with which we speak, act and treat one another. Acting respectfully gives people the dignity they deserve. Respect is behaving in a way which makes life more peaceful and orderly for everyone.
Kindness	We look for ways to help each other, kindness is showing you care about everyone, knowing that everything is part of God's creation. Kindness is being concerned about the welfare of others. Kindness is showing love to someone who is sad or needs your help.
Trust	We tell the truth and can be trusted. Trust is having faith, hope and a positive outlook. It is relying on and believing in someone or something. It is having confidence that the right thing will come about, without trying to control it or make it happen. We know we are never alone, and that God is always with us.
Compassion	We understand and care for someone who is in trouble or has made a mistake. It is being kind and forgiving even when others may not be sorry for what they have done. It is caring deeply and wanting to help. It is being considerate and having regard for other people and their feelings. It is also important to show compassion to others and yourself. Compassion is one of the most meaningful ways to show love; it is the outworking of genuine love.
Gratitude	We are thankful for all we are given and all of God's creation. Gratitude is to be thankful for what you have. It is an attitude of gratitude for learning, loving and being. It is also being thankful for the little things which happen around you and within you every day. It is an openness and willingness to receive each of God's bounties. To be grateful is to have a sense of wonder about the beauty of this world and to welcome all of life as a gift. Gratitude is a path to contentment.
Courage	We understand that showing courage is doing what needs to be done even when it is really hard and scary. Courage is personal bravery in the face of fear. Courage is going ahead even when you feel like giving up or quitting. Courage is needed in trying new things, in facing the truth and in picking yourself up after a mistake ready to try again. It comes from knowing deep down what is right for you and believing in yourself to do it. Courage can come from prayer and the trust that God will help.

Our vision and values are rooted in scripture, particularly Jesus' teaching on Kingdom principles in the Sermon on the Mount. This is a practical lesson on how to live our lives, rooted in Christian Values. At Rushwick, working with and for others, we endeavour for all our community to know how much they are valued by one another and God.

Jesus teaches us to ask, seek and knock and in response, God will open our hearts and minds to receive, to find and the door will be opened to a world of opportunities.

Intent:

We believe that all children should have:

- A deep understanding of maths and number.
- A positive and resilient attitude towards mathematics and an awareness of the fascination of mathematics.
- Competence and confidence in mathematical knowledge, concepts and skills.
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- Fluency in mathematics where children can express ideas confidently and talk about the subject using mathematical language.
- An understanding of the importance of mathematics in everyday life.

Our maths curriculum aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics through placing number at the heart of our curriculum with daily practice to ensure fluency of number facts
- reason mathematically by following a line of enquiry through ensuring discussion plays a vital role in lessons. Children are actively encouraged to discuss with peers and teachers, (How? Why?) using mathematical language
- can solve problems by ensuring problem solving is embedded into lessons and variation of questions are used to enable children to apply their knowledge to different situations.
- Challenge is built into every lesson for pupils who grasp concepts rapidly through sophisticated problems and an opportunity for children to demonstrate their understanding creating their own problems.

Implementation

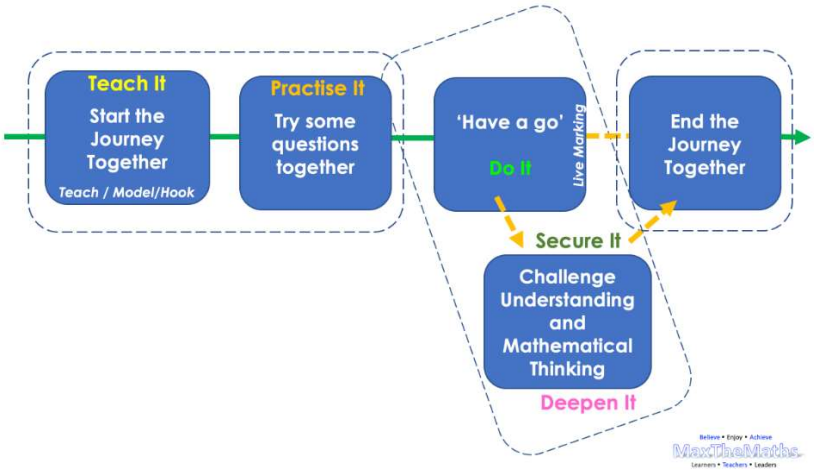
- Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6.
- Children are being taught using a full Mastery approach using the lesson design of Remember It, Teach It, Practise It, Do It, Secure It, Deepen It.
- We use White Rose Schemes of Work as a tool to support teachers with their planning and assessment.
- The White Rose Calculation Policies are used within school to ensure a consistent approach to teaching the four operations over time.
- Times Table Rockstars is used within school and at homework, to ensure a consistent approach to learning times tables, heat maps are shared with parents with the aim of children turning it green by the end of year 4.
- To learn mathematics effectively, some things have to be learned before others, e.g. place value needs to be understood before working with addition and subtraction, addition needs to be learnt before looking at multiplication (as a model of repeated addition).
- Our emphasis is on number skills first, carefully ordered, throughout our primary curriculum.
- Additional 'Maths on Track' sessions are taught in KS2 to give the children chance to retrieve prior learning.
- The NCTEM Mastering Number programme is used in Reception and KS1 to ensure number understanding.

Impact

- Children demonstrate a deep understanding of maths.
- Children display a positive and resilient attitude towards mathematics and an awareness of the fascination of mathematics.
- Children show confidence in believing that they will achieve.
- Each child achieves objectives (expected standard) for year group.
- 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.

Lesson Format

Daily morning Maths lessons are taught following a theme, mapped out using White Rose Block learning. These lessons are 45 minutes long using lesson design of Remember It, Teach It, Practise It, Do It, Secure It, Deepen It.



Remember it

Recap on previous learning to support the learning objective of the lesson.

Teach it

Teachers teaching the key concepts of the lesson including **modelling** what it should look like and the methods involved. This is the key part of the lesson where all children are in attention. We introduce **Sentence Stems** alongside to support steps to success.

Practise it

Doing it altogether with the teacher. There is an emphasis on talking aloud the thought processes and the methods involved whilst pitting it into action. All children have the same opportunities to succeed and access age appropriate learning.

Do it

This is independent learning where all children are having ago at the new skill with support of manipulatives as well as pictoral representations. Children work more at their own pace, writing into their books with the adults live marking to support learners. Brilliant mistakes (misconceptions) are celebrated and shared.

Secure it

This is opportunity to apply reasoning usually with a focus on a misconception. True or false style questions are often used to get children thinking about the methods or strategies behind the answer.

Deepen it

These are open ended questions providing opportunities to show depth in understanding. They may be investigative and take lots of resilience or trial and error.

An additional session of 'Maths on Track' (MOT) is taught four mornings a week for deliberate practice following gap analysis or used for arithmetic skills in KS2. KS1 following the program Mastering Number during these MOT.

Assessment

Assessment for learning (AFL) – to happen in the lesson following our marking and feedback policy. Live marking to be done when possible from both teaching and support staff.
Summative Assessment – to use WRM termly tests across all of Key Stage 1 and 2. Year 6 will use the SATs tests/Moderation in the summer term.

Arbor Tracker – This is used to collate Teacher assessments termly. This data is then analysed and Pupil Progress meetings take place.

Maths Groupings

Children to be sat in mixed ability positions with learning partners. Every child has the same opportunity to achieve the objective in each lesson.

Role of Teaching Assistants

TAs to be used to facilitate the learning of the children in the class. TAs to carry green/pink pens with them around the class to be used for marking of the activities they are doing. If children are struggling TA to assist, but inform teacher if they still do not understand. TAs not to always be placed with the least experienced children.

Challenge and differentiation

Children to be set work that challenges them in each lesson. Differentiation comes through the level of support. The vigilant teacher and TA provide support and challenge to whoever needs it at different points in the lesson. We have the same expectation of all children and support and challenge them to achieve the objectives. All children have the opportunity to gain a deeper level of understanding regardless of any pre-conceived views on prior attainment.

- We adopt a positive mindset approach to learning
- We value mistakes, using them with the class as teaching points (known as 'Brilliant mistakes' at Rushwick)
- All children have the same access to the same content taught in the class.
- We do not ability group.
- We support children with all levels of attainment.
- Some additional support may occur outside the maths lesson.

Children to apply their understanding and show depth of learning through frequency, reasoning and problem solving questions. STEM sentence starters to be used to help reason in Mathematics.

Times Table Rock Stars

Introduced in Year 2 after Spring 2 when multiplication and division unit is taught. Children to sit a Gig once a half term to track progress. Garage mode to be accessed 3 times a week in school and encouraged at home. Garage mode is bespoke to each child tailoring questions to each child. Children and parents are made aware of their heat map (speed in which children answer each fact) with the aim of turning their heat map green by the end of year 4. Children celebrated with Go Green certificates. Children in year 5 and 6 who have turned their heat map green are challenged with the next heat map to include x25, x100. Children yet to achieve heatmap in years 5 and 6 are identified for additional time and intervention.

Progression

DIOCESE OF WORCESTER MULTI ACADEMY TRUST
TO LOVE | TO LEARN | TO SERVE

Maths Curriculum Overview - Rushwick Primary School

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Place Value, addition and subtraction	addition and subtraction (cont.) shape	Place Value, Addition and subtraction	Place Value, Length and height, Mass and volume	Multiplication and division, fractions, Position and direction	Place Value, Money, Time
Year 2	Place Value, Addition and subtraction	addition and subtraction (cont.) shape	Money, Multiplication and division (Introduce TTRS)	Length and height, Mass, capacity and temperature	Fractions, Time	Statistics, Position and direction
Year 3	Place Value, Addition and subtraction	Multiplication and division A	Multiplication and division B, Length and perimeter	Fractions A, Mass and capacity	Fractions B, Money, Time	Shape, Statistics