



Chilham St Mary's CE Primary School

MATHEMATICS POLICY

Policy agreed: September 2021
Policy review: September 2024

At Chilham St Mary's, we are a diverse, loving community of learners, committed to providing firm foundations built on God's love and forgiveness for all. Within our family of learners, guided by Jesus' example, we nurture and encourage every individual to have the confidence to achieve their own potential, now and in the future.

Aim

The National Curriculum for Mathematics emphasises the importance of all pupils mastering the content taught each year and discourages the acceleration of pupils into content from subsequent years.

'The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, this may be through additional practice, before moving on.'
(National curriculum page 3)

The national curriculum for mathematics aims to ensure that all pupils:

- Become **fluent** in the fundamentals of mathematics, including through varied and frequent practise 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.'

Intent and Implementation

At Chilham St Mary's, all teachers use the White Rose Maths Hub as a process for teaching mathematics. When introducing children to new concepts, they should have the opportunity to build fluency in topics by taking the following approach:

Concrete – children should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial – children should build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.

Love

Trust

Respect

Honesty

Forgiveness

Perseverance

Abstract – with the foundations firmly laid, children should be able to move to an abstract approach using numbers and key concepts with confidence.



- Reasoning and problem solving is encompassed in the above approaches to deepen and master all aspects of mathematics.
- In lessons there are opportunities for exploration, structuring, documenting, practice and reflecting.
- Input is delivered through small steps of sequential learning with opportunities for children to tackle problems.
- Carefully planned questions are used to assess understanding and address misconceptions using a ping-pong style of questioning, where appropriate. During the input, children are exposed to the same element of maths in different representations to develop varied fluency.
- Guided practice allows children to develop fluency. They can then practise and apply their new knowledge (and methods) to different problems with support as needed from a peer or adult.
- Additional fluency activities, such as the counting stick, surrounding arithmetic skills may be practised both in and out of the main maths lesson.

For more information about the White Rose Maths scheme and for a curriculum overview visit: <https://whiteroseeducation.com/resources>. Please note that we follow the most up to date version of the scheme (V3) of the mixed aged planning.

Agreed principles for mathematics

- The date will be clearly indicated at the top left-hand corner of children's work and underlined (where handwritten).
- All maths work will be done in pencil.
- A line will be left after the date and the learning objective will be written underneath and underlined (Key Stage 2), unless stuck in as part of the success ladder.
- In KS2, where worksheets are not used, children should draw a margin on the left of the page.
- Where possible, the checking or marking of work will be done with or by the child who will be given the opportunity to ask questions and self-correct.
- Where children use a formal method of calculation, these will be in-line the White Rose calculation policies: <https://assets.whiteroseeducation.com/new-schemes/Addition%20and%20subtraction%20calculation%20policy%20July%202022%20v2.pdf> and <https://assets.whiteroseeducation.com/new-schemes/Multiplication%20and%20Division%20calculation%20policy%20July%202022.pdf>
- Self-assessment will be encouraged but may not necessarily be recorded in books.
- In KS2 homework will be set weekly and in KS1 maths activities are included in termly homework.

Love

Trust

Respect

Honesty

Forgiveness

Perseverance

- There will be a working maths wall in every classroom with key resources to support current learning. EYFS use number of the week display.
- Children are encouraged to form number in line with our policy (as shown below) to avoid numbers being misread. 'Letter Join' is used to support this.

1 2 3 4 5 6 7 8 9

Equal Opportunities

- Vulnerable groups are identified within each class and appropriate support is provided with the support of the SENCo, where appropriate. Progress of vulnerable groups will be monitored during pupil progress meetings.
- Differentiated activities across the school will take account of the children's differing needs and abilities ensuring all children have access to the mathematics curriculum at the appropriate standard.
- Children with special educational needs in mathematics are supported to enable them to achieve and make progress in maths.
- Additional provision is made for children who are working significantly below their age-related expectations within the national curriculum objectives.

Love

Trust

Respect

Honesty

Forgiveness

Perseverance

Curriculum Overviews (<https://whiteroseeducation.com/resources>)

Year 1/2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Year 1 – Number Place value (within 20) VIEW		Year 1 – Number Addition & subtraction (within 20 inc. recognising money) VIEW				Year 1 – Number Place value & multiplication (within 50) VIEW					
	Year 2 – Number Place value (numbers to 200) VIEW		Year 2 – Number Addition & subtraction (within 100 inc. money) VIEW				Year 2 – Number Multiplication VIEW					
Spring term	Year 1 – Number Division & consolidation VIEW	Year 1 – Number Place Value (within 100) VIEW	Y1 – Measurement Length & height VIEW	Year 1 – Geometry Shape & consolidation VIEW		Year 1 – Number Fractions & consolidation VIEW						Consolidation
	Year 2 – Number Division VIEW	Year 2 – Number Statistics VIEW	Y2 – Measurement Length & height VIEW	Year 2 – Geometry Properties of shape VIEW		Year 2 – Number Fractions VIEW						
Summer term	Y1 – Geometry Position & direction VIEW	Year 1 – Measurement Time VIEW	Problem solving & efficient methods VIEW		Year 1 – Measurement Weight & volume VIEW		Consolidation & investigations VIEW					
	Y2 – Geometry Position & direction VIEW	Year 2 – Measurement Time VIEW	Problem solving & efficient methods VIEW		Year 2 – Measurement Mass, capacity & temperature VIEW		Consolidation & investigations VIEW					

Love

Trust

Respect

Honesty

Forgiveness

Perseverance

Year
3/4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Number Place value VIEW		Number Addition and subtraction VIEW				Number Multiplication and division A VIEW					
Autumn term	Number Place value VIEW			Number Addition and subtraction VIEW		Measurement Area VIEW	Number Multiplication and division A VIEW			Consolidation		
Spring term	Number Multiplication and division B VIEW		Measurement Length and perimeter VIEW		Number Fractions VIEW		Measurement Mass and capacity VIEW					
Spring term	Number Multiplication and division B VIEW		Measurement Length and perimeter VIEW	Number Fractions VIEW			Number Decimals VIEW					
Summer term	Number Fractions VIEW	Measurement Money VIEW	Measurement Time VIEW		Geometry Shape VIEW	Statistics Statistics VIEW		Consolidation				
Summer term	Number Decimals VIEW	Measurement Money VIEW	Measurement Time VIEW	Consolidation			Geometry Shape VIEW	Statistics Statistics VIEW	Geometry Position and direction VIEW			

Love

Trust

Respect

Honesty

Forgiveness

Perseverance

Year 5/6

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Number Place value VIEW		Number Addition and subtraction VIEW		Number Multiplication and division A VIEW			Number Fractions A VIEW				
Autumn term	Number Place value VIEW	Number Four operations VIEW					Number Fractions A VIEW	Number Fractions B VIEW	Measurement Converting units VIEW			
Spring term	Number Multiplication and division B VIEW		Number Fractions B VIEW		Number Decimals and percentages VIEW			Measurement Perimeter and area VIEW		Statistics VIEW		
Spring term	Number Ratio VIEW	Number Algebra VIEW	Number Decimals VIEW	Number Fractions, decimals and percentages VIEW		Measurement Area, perimeter and volume VIEW		Statistics VIEW				
Summer term	Geometry Shape VIEW		Geometry Position and direction VIEW		Number Decimals VIEW			Number Negative numbers VIEW	Measurement Converting units VIEW		Measurement Volume VIEW	
Summer term	Geometry Shape VIEW		Geometry Position and direction VIEW		Themed projects, consolidation and problem solving							

Love

Trust

Respect

Honesty

Forgiveness

Perseverance