



MATHS POLICY

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Curriculum Vision

At Jubilee, our vision for Mathematics is for every child to become a confident, fluent mathematician who approaches the subject with enthusiasm and curiosity. Through our mastery approach, all children experience success, develop deep conceptual understanding and gain the knowledge and skills needed for secondary school and beyond.

Number Fluency

Our structured number-fluency programmes help children recall key facts efficiently and accurately, selecting appropriate methods with flexibility. Carefully sequenced learning builds strong numerical foundations that children can apply across varied mathematical contexts.

Problem Solving

Children regularly reason, make connections and justify their ideas, enabling them to tackle unfamiliar problems with confidence. These behaviours support our children to become flexible, resilient mathematicians who apply their understanding across varied mathematical contexts.

Mathematical Thinking

Oracy underpins our approach, supporting children to articulate their reasoning and use precise mathematical language. Children learn to justify and prove ideas by exploring generalisations, patterns and relationships. Through structured discussion, our children think deeply and make connections.

Inclusion

We ensure all children, regardless of background or need, can access and succeed in Mathematics. Through well-planned support and challenge, every child engages meaningfully with the learning and reaches their full potential.

Curriculum

At Jubilee, our mathematics curriculum is built on the National Curriculum programmes of study, ensuring full coverage of the statutory knowledge and skills pupils need from Early Years to Year 6. Our approach is coherent, carefully sequenced and designed to develop confident, fluent and resilient mathematicians.

We follow the White Rose Maths Scheme of Learning from Nursery to Year 6. This provides a structured progression of small, connected steps that build deep conceptual understanding over time. The scheme supports our mastery approach by emphasising representation, reasoning and problem-solving throughout the curriculum.

Yearly Unit Overviews

We follow the White Rose Yearly Overviews from Nursery to Year 6 which helps to help structure and sequence children's learning across the year. These plans carefully map out the key mathematical concepts to be taught in each year group, ensuring that knowledge and skills are built progressively over time. Our approach encourages children to develop a deep understanding of maths through small, manageable steps, reasoning activities and problem-solving opportunities. While the Yearly Overview provides a clear framework for teaching, teachers adapt lessons to meet the needs of their classes, ensuring that all pupils are supported and challenged to achieve their full potential in mathematics. Please click [here](#) to see breakdown of each Year group's Yearly Overview.

Curriculum Progression Map

Our Whole School curriculum progression Map is located on our school website and be found by clicking [here](#). It outlines how knowledge and skills develop from year to year, ensuring clear progression from Early Years through to Year 6.

KS1 Fluency Bee Programme

In Key Stage 1, we use the White Rose Fluency Bee programme to develop pupils' confidence and understanding of number through short, daily fluency sessions. Using concrete resources, pictorial representations and abstract calculations, pupils build strong number sense, deepen their conceptual understanding and develop effective mental calculation strategies. Regular opportunities for mathematical discussion help children explain their thinking and make connections between key concepts, creating secure foundations for future learning.

KS2 Fluent in Five Programme

In Key Stage 2, we use the Fluent in Five programme to develop pupils' arithmetic fluency, accuracy and confidence through daily practice during morning registration. Carefully sequenced questions revisit key number facts and calculation skills, strengthening recall and supporting long-term retention. Pupils learn to select the most efficient method for a calculation, choosing appropriately between mental and written strategies. As a result, they become more fluent, accurate and confident mathematicians who can apply their calculation skills effectively across the mathematics curriculum.

Foundational Mathematical knowledge in EYFS and KS1

We know that strong early foundations in mathematics matter most, so we prioritise giving every child a secure understanding of number from the very start of their education. Across Early Years and Key Stage 1, children are introduced to the essential building blocks of early maths, including counting principles, subitising, number composition, comparison and part-whole relationships. These concepts form the foundation for confident mathematical thinking as children move through school.

Our curriculum is carefully sequenced so that new ideas are introduced in small, manageable steps. This ensures that learning is coherent and builds steadily from Reception into Key Stage 1. We follow the White Rose scheme to support this progression and to make sure that all children are guided carefully through each stage of their learning.

We are committed to ensuring that every child keeps up with the curriculum. When a child begins to find a concept difficult, we provide immediate, targeted support so they can secure their understanding before moving on. This approach helps prevent gaps from forming and ensures that all children have the strong mathematical foundations they need for future success.

In EYFS, we focus on teaching key counting principles and early number concepts:

Concepts	Subitising	The ability to see how many items are in a small group without counting. Example: Instantly recognising that a dice pattern shows 5.
	Number Composition	Understanding that numbers are made up of other numbers. Example: • 5 is made of 3 and 2 • 7 is made of 5 and 2
	Comparison	The ability to compare quantities using language such as: • more • fewer • greater • smaller • equal
	Part-Whole Relationships	Recognising that a whole can be split into parts, and the parts combine to make the whole. Example: A part-whole model showing: • whole = 6 • parts = 4 and 2

Counting principles	The Cardinal Principle (Cardinality)	The understanding that the <i>last number in a count tells you how many are in the set</i> . Example: When a child counts “1, 2, 3, 4,” they know the answer to “How many?” is 4.
	The One-to-One Correspondence Principle	Matching one number word to one object when counting.
	The Abstraction Principle	This involves children understanding that anything can be counted, including things that cannot be touched, such as sounds and movements e.g. jumps
	The Stable Order Principle	Understanding that number words must be said in the correct order when counting.
	The order Irrelevance Principle	This involves children understanding that the order in which we count a group of objects is irrelevant. There will still be the same number
	The Conservation of Number Principle	Knowing that the quantity stays the same even if the arrangement changes. Example: Five counters in a line is the same amount as five counters in a circle.

Foundations on number Fluency Yr 1 - 6

We ensure all children can calculate accurately by building on their additive and multiplicative fluency. Please see a breakdown of where these fluency foundations are prioritised, explicitly taught and rehearsed.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<u>Additive</u> factual fluency	Addition and subtraction <u>within</u> 10	Addition and subtraction <u>across</u> 10	Secure and maintain fluency in addition and subtraction <u>within and across</u> 10 through continued practice			
<u>Multiplicative</u> factual fluency		Recall the 2,5 and 10 multiplication tables and corresponding division facts.	Recall the 3,4 and 8 multiplication tables and corresponding division facts.	Recall the 6, 9 7,11 and 12 multiplication tables and corresponding division facts.	Secure and maintain fluency in all multiplication tables and corresponding division facts through continued practice.	Secure and maintain fluency in all multiplication tables and corresponding division facts through continued practice.

What are additive and multiplicative fluency?

Additive fluency is the ability to recall and apply addition and subtraction facts efficiently, accurately and flexibly. It involves understanding number relationships, composition and decomposition of number, and using known facts to derive unknown facts rather than relying on counting.

Multiplicative fluency is the ability to recall and apply multiplication and division facts with accuracy, efficiency and flexibility, supported by a secure understanding of multiplicative relationships. Building on strong additive number sense, pupils develop the ability to recognise patterns, make connections and choose appropriate strategies when working with multiplication and division

How are additive and multiplicative fluency taught at Jubilee?

At our school, additive and multiplicative fluency are developed through a consistent, mastery-based approach using the White Rose Scheme of Learning. Every Maths lesson begins with a dedicated fluency starter, enabling pupils to rehearse and strengthen key number facts and strategies through regular retrieval and practice. We use the White Rose Fluency Bee programme to systematically develop efficient, flexible and accurate recall of number facts, ensuring pupils build strong foundations in additive thinking. Additive fluency is further consolidated through NumBots, which supports rapid recall of addition and subtraction facts and develops secure number sense. Multiplicative fluency is reinforced through Times Tables Rock Stars, which enables pupils to develop automatic recall of multiplication and division facts in line with national curriculum expectations.

What impact does additive and multiplicative fluency have on pupils at Jubilee?

The consistent development of additive and multiplicative fluency enables pupils to access the full breadth of the National Curriculum with confidence. When key number facts and calculation strategies are secure and automatic, pupils can devote more of their cognitive resources to reasoning, problem-solving and the application of mathematics in increasingly complex contexts.

This strong foundation is reflected in pupil outcomes, with our Multiplication Tables Check results consistently exceeding the national average, demonstrating secure multiplicative fluency, and strong attainment in the KS2 SATs Arithmetic paper, evidencing pupils' confidence and accuracy with core calculation skills. As a result, pupils are well equipped to engage successfully with age-related expectations and are prepared for the increasing mathematical demands of Key Stage 3.

Teaching and Learning

At Jubilee, we deliver maths using a carefully designed lesson structure that is adapted for each Key Stage. This ensures that teaching is developmentally appropriate while maintaining consistency in expectations, modelling and mathematical language. In Nursery, this takes the form of a *provision structure* rather than a lesson structure, recognising the continuous provision approach of the Early Years curriculum, where mathematical learning is embedded throughout play, exploration and adult-led interactions across the day.

Key elements of each lesson and their purpose:

The Flashback 4 is a short retrieval activity designed to strengthen core mathematical knowledge through spaced practice. It helps pupils revisit previously taught skills so they remain fluent and automatic, make connections between concepts, and reduce cognitive load when learning something new. A high success rate is essential so pupils begin the lesson with confidence and readiness to learn.

The Fluency Starter strengthens rapid recall and confidence with essential number facts, giving pupils the secure foundations needed for the main lesson. It revisits key skills that directly support the upcoming small step, reducing cognitive load so children can focus fully on new learning.

In the **'I Do' stage**, the teacher makes the key concept clear by breaking it into small, manageable steps. They model the thinking, language and representations needed for success, guiding pupils through shared practice in the **'We Do' stage** and checking understanding so they are ready to apply the learning independently.

The Partner Task, often using concrete manipulatives, gives pupils hands-on opportunities to explore and visualise the mathematical concept. By physically representing ideas, children connect real objects, visual models and symbols, developing deeper understanding and confidence before moving to pictorial and abstract representations.

Independent Practice gives pupils the chance to apply new learning on their own through carefully varied tasks that deepen understanding and fluency. This stage checks that pupils can work accurately and confidently without teacher support

The Red Hot Challenge deepens and extends pupils' mathematical thinking beyond the main lesson. It gives children opportunities to reason precisely, apply learning in unfamiliar contexts, and explore multiple strategies, while staying aligned to the White Rose small-step journey. The focus is on depth, connections and justification—not speed or new year group content.

Maths (Nursey): Provision Framework

White Rose Blocks: Maths is taught across the year following the White Rose progression.

Meaningful Maths Talk: Staff model and extend mathematical vocabulary in real, purposeful contexts.

Continuous Provision: Mathematical concepts are consolidated through ongoing peer and adult interactions during play.

Planned Maths Games: Games are intentionally planned and played to match the current White Rose block, giving children repeated, playful practice of key concepts and mathematical language.

Observation: Adults watch children at play, using interactions and questioning to assess mathematical thinking and language.

Continuous Assessment: Staff assess understanding through small-group adult-led sessions and observations in provision. Judgements are tied directly to the learning within each White Rose block.

Responsive Planning: Ongoing assessments inform next steps, ensuring teaching meets children's needs and interests.

Progress towards EYFS Outcomes: Planning and assessment support children's progress through the EYFS maths curriculum.

Team Moderation: Staff regularly discuss and moderate assessments to ensure consistency and shared understanding.

Maths (Reception): Lesson Framework

Number Blocks: Plan and watch episode in line with small step

Fluency: Subitising Starter moving from perceptual to conceptual and developing a deep understanding of the composition of number up to 10.
Move onto Key Reception Skills (See WR SOL)

Recap: Review learning from previous lesson.
Using same representations previously taught.

Lesson Objective: To know how to...taken from White Rose small step.

I Do: “My turn” “Watch me”
Demonstrate learning linked to small step using concrete representations and planned stem sentences.

We Do: Children participate in modelled concrete Partner Task, using planned stem sentences to support use of mathematical talk.

Feedback: Adults circulate and support focus pupils with activities, check for understanding and provide opportunities for children to develop their reasoning.

You Do-Independent Practice: Children directed to planned tabletop activities which support and deepen understanding of small step.

Assessment: Teachers use weekly assessment tick sheet to make ongoing assessment of understanding of mathematical concepts.

Intervention: Catch up adult intervention facilitated for those who have not grasped the mathematical concept taught.

Maths (KSI): Lesson Framework

Retrieval: Flash Back Four to support retention of key mathematical skills and concepts. (*Input during early morning work*)

Fluency: Review/Recall/Rehearse/Counting - Planned to support access to the main teaching of the lesson.

Recap: previous learning from the unit of work.

Lesson Objective: To know how to...taken from White Rose small step.

I Do: Model activity linked to small step using concrete/pictorial representations.

We Do: Partner talk task, using stem sentences to support mathematical thinking.

Feedback: Use a range of feedback strategies to assess learning, allow all children to demonstrate understanding and develop their reasoning.

Partner Task: Model and provide children with an activity to deepen understanding of concept often using manipulatives.

I Do: Model independent activity linked to small step.

We Do: Mini Whiteboard to practice taught concept.

Feedback: Use a range of feedback strategies to assess learning, allow all children to demonstrate understanding and develop their reasoning. Adults identify child who require additional intervention.

You Do: Children complete independent activity linked to modelled small step.

Red Hot Challenge: Additional challenge activities planned for all to deepen mathematical understanding.

Maths (KS2): Lesson Framework

Retrieval: Flash Back Four to support retention of key mathematical skills and concepts previously taught. Challenge question planned for quick finishers.

Fluency: Review/Recall/Rehearse/Counting to support the learning objective of the lesson

Lesson Objective: What small step will the children be learning
To know how to... taken from White Rose small step.

I Do: Model activity linked to small step using concrete/pictorial representations to support Mathematical understanding

We Do: Children complete guided practice linked to modelled small step with concrete/pictorial representations and stem sentence support if required

Check for understanding: Use a range of feedback strategies including mini whiteboards to assess learning allowing all children to demonstrate their understanding and develop their reasoning skills.

You do: Children complete independent activity linked to modelled small step with concrete/pictorial and stem sentence scaffolded support if required

Red Hot Challenge: Additional challenge activities planned for all children to deepen mathematical understanding.

Assessment

Early Years Foundation Stage

Formative Assessment

- In Nursery, teachers interact with children through play-based activities to assess how successfully they are developing mathematical understanding. At the end of each White Rose Maths block, teachers use their observations and assessment information to identify children who need additional support and intervention.
- In Reception, teachers work with focus groups to assess how successfully children have grasped the daily learning objectives. Teachers use this information and record this on our internal assessment tracker. Teachers revisit learning with individual children who need support, or provide challenge and extension for those ready to move forward.

Statutory Assessment: Reception Baseline Assessment

- All children complete the Reception Baseline Assessment (RBA) at the start of Reception. Its purpose is to establish each child's starting point in early mathematics, language and communication, and it forms the national progress measure used to evaluate pupils' development from the beginning of Reception to the end of Key Stage 2.

Summative Assessment

- At the end of Nursery, teachers use assessment information gathered throughout the year to make a prediction against the Mathematical Early Learning Goal and to identify children who will need additional support and focus as they move into Reception.
- At the end of Reception, children are assessed against the Mathematical Early Learning Goal. This determines whether they have achieved a Good Level of Development across the Early Years Foundation Stage.

Key Stage 1

Formative Assessment

- Teachers make daily assessments against the learning objective of the day. They work closely with children during the lesson, giving live feedback and moving learning forward in the moment.

White Rose End of Unit Assessments

- Children complete regular end-of-unit mini assessments once a unit has been taught to check what they have learned and how securely they can apply it. These assessments provide a snapshot of attainment at the end of a block, and teachers use the results to identify gaps and plan next steps.

Summative Assessment

- We use NTS (National Test-Style Standardised) assessments on a termly basis - Autumn, Spring and Summer, to gain a broader picture of pupils' attainment and progress. These outcomes help us track development over time and inform future planning.

Key Stage 2

Formative Assessment

- Teachers make daily assessments against the learning objective of the day. They work closely with children during the lesson, giving live feedback and moving learning forward in the moment.

White Rose End of Unit Assessments

- Children complete regular end-of-unit mini assessments once a unit has been taught to check what they have learned and how securely they can apply it. These assessments provide a snapshot of attainment at the end of a block, and teachers use the results to identify gaps and plan next steps.

Summative Assessment

- We use NTS (National Test-Style Standardised) assessments on a termly basis - Autumn, Spring and Summer, to gain a broader picture of pupils' attainment and progress. These outcomes help us track development over time and inform future planning.

Statutory Assessment: Year 4 Multiplication Tables Check

- In Year 4, children complete the Multiplication Tables Check (MTC). This national assessment checks pupils' fluency in multiplication facts up to 12×12 . The purpose is to ensure children have secure, automatic recall of times tables, which is essential for accessing more complex mathematical concepts in Upper Key Stage 2 and beyond.

Statutory Assessment: Key Stage 2 SATs

- At the end of Year 6, pupils sit the Key Stage 2 SATs in mathematics. These statutory assessments provide a national measure of each child's attainment and offer a clear picture of how securely they have mastered the curriculum by the end of primary school. The results also contribute to the school's overall performance data and support transition discussions with secondary schools.

Inclusion

We ensure that all children, regardless of background or need, can access and succeed in Mathematics. Through well-planned support and appropriate challenge, every child engages meaningfully with learning and is enabled to reach their full potential.

Support is provided through carefully scaffolded tasks, coherent lesson sequencing, and our whole-school inclusive pedagogy. Adult intervention focuses on helping children *keep up rather than catch up*, ensuring that misconceptions are addressed promptly and learning remains secure for all children. This allows wherever possible, all children to access their year group curriculum at the same pace.

Challenge is offered by creating opportunities for children to deepen their mathematical thinking. Through rich tasks, reasoning prompts, and explicit connections across concepts, pupils extend their understanding beyond procedural fluency. Extension activities known as *Red Hot Challenges* are available for all learners, enabling them to apply core knowledge in new and varied contexts.

Subject leaders monitor provision to ensure that all children with complex needs receive the relevant curriculum adaptations. Class teachers plan learning provision, although in some cases, where appropriate, delivery may be supported by another adult to ensure that every child can access the curriculum effectively.

Home Learning

At Jubilee, we believe that parental involvement is fundamental in helping children to become confident and fluent mathematicians.

Below is an overview of home learning expectations in Maths:

	Home Learning Minimums	For Accelerated Progress
Reception	No minimum home learning expectation	Completely weekly at home maths challenge shared in the weekly newsletter.
Maths KS1	Progress through Numbots stages meeting termly expectations. <i>*Please see table below for breakdown of termly expectations</i>	Complete challenge activities on Numbots.
Maths Lower KS2	Progress through Tables Rock Stars accessing all game types. Reach "Rock Star" status or above when playing Studio mode.	1000 points weekly on Mathletics.
Maths Upper KS2	1000 points weekly on Mathletics	Get up to Rock Legend Status on Times Tables Rock Stars.

	End of term expectation	Topics covered
Year 1		
Autumn Term	Complete Stages Rust, Iron, Tin Challenge activities will become available once Iron Stage is completed.	Counting, subitising, one-more/one-less, early addition, number bonds
Spring Term	Complete Stages Copper, Steel, Chrome	Number bonds to 10, addition/subtraction within 20, early teen numbers
Summer Term	Complete Stages Glass Tungsten	Teen numbers, tens/ones, partitioning, bridging through 10

Year 2		
Autumn Term	Complete Stages Aluminium, Kevlar	Place value to 100, adding tens/ones, derived facts
Spring Term	Complete Stages Carbon Fibre, Titanium, Bronze	Regrouping, mixed operations, flexible strategy selection, two-digit fluency
Summer Term	Complete Stages Silver, Gold, Platinum, Diamond	Confident regrouping, Flexible strategy selection, High-speed recall, Mixed operations, Two-digit mastery