



Mathematics @ Wynndale

Progression from EYFS to Year 6

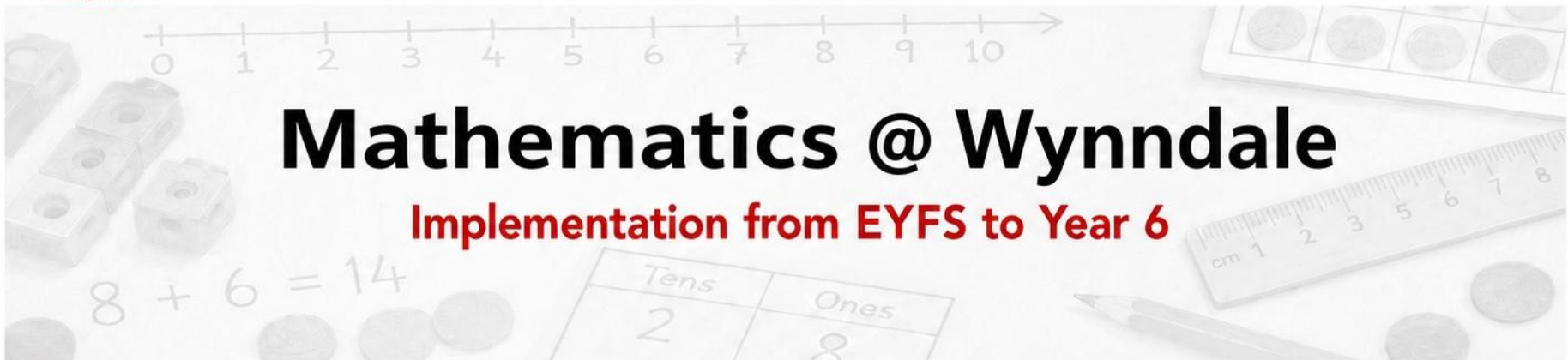
Our Mathematics Curriculum Intent

At Wynndale Primary School we recognise that mathematics should develop children's confidence, fluency and enjoyment in the subject, leading to a deep understanding of number, structure and relationships. Mathematics should help children to make sense of the world, solve problems and communicate their thinking clearly.

Our aim at Wynndale is to:

- Develop** fluency and confidence by securing number facts, operations and efficient calculation strategies so pupils can work with increasing accuracy and independence.
- Deepen** conceptual understanding through exploration, representation and reasoning so children understand not just how mathematics works, but why.
- Encourage** problem-solving and mathematical reasoning through structured opportunities to explain, justify, predict and make connections.
- Create** a positive and inclusive mathematical culture where all pupils are supported, challenged and encouraged to see mistakes as part of learning.
- Build** mathematical connections so children recognise links within mathematics and across the wider curriculum and understand the relevance of mathematics in everyday life.

A Mathematician leaving Wynndale will be confident, fluent and reflective. They will reason mathematically, explain and justify their ideas, use precise vocabulary, select efficient strategies and apply their understanding to solve problems. They will see mathematics as connected, purposeful and valuable in the world around them.



Mathematics @ Wynndale

Implementation from EYFS to Year 6

Our Mathematics Curriculum Implementation

At Wynndale Primary School we recognise that mathematics should develop children's confidence, fluency and enjoyment in the subject, leading to a deep understanding of number, structure and relationships. Mathematics should help children to make sense of the world, solve problems and communicate their thinking clearly.

Our implementation at Wynndale includes:

- 1. Teaching through a mastery approach**
Learning is broken into small, coherent steps so children build secure understanding over time. Teachers use NCETM Teacher Knowledge Guides and mastery principles to plan lessons that are ambitious, inclusive and responsive to need. We are also part of the East Midlands Maths Hubs Sustaining Work Group.
- 2. Using concrete, pictorial and abstract representations**
Children explore concepts through manipulatives, diagrams and images before moving to abstract recording. This helps them make sense of mathematical structures and see connections between ideas.
- 3. Developing fluency, reasoning and problem-solving together**
Children revisit key number facts, practise efficient calculation strategies and apply their understanding in a range of contexts. They are encouraged to explain, justify, predict and make mathematical connections.
- 4. Promoting mathematical talk and vocabulary**
Precise mathematical vocabulary is explicitly taught and revisited. Stem sentences, partner talk and whole-class discussion help children communicate their thinking clearly and learn from the ideas of others.
- 5. Assessing, adapting and revisiting learning**
Teachers use questioning, retrieval practice, live feedback, observation and ongoing assessment to identify misconceptions and adapt teaching. This ensures that learning is secure and that all children make progress.

Across school, mathematics is taught through carefully structured lessons, coherent progression and high expectations so that children know more, remember more and apply their understanding with confidence.



Mathematics @ Wynndale

Impact from EYFS to Year 6

Our Mathematics Curriculum Impact

Through high-quality teaching, consistent approaches and a carefully sequenced curriculum, children leave Wynndale as confident, fluent and reflective mathematicians, ready for the next stage of their education.

They develop secure knowledge, strong reasoning skills and a positive attitude towards mathematics.

A mathematician leaving Wynndale will:

1. Be confident, fluent and independent

Children recall and use number facts, efficient calculation strategies and precise mathematical vocabulary with growing accuracy, efficiency and independence.

2. Reason, explain and justify

Children explain their thinking clearly, justify their ideas, make conjectures and use representations and mathematical language to communicate with precision.

3. Be resilient and reflective

Children persevere when faced with challenge, learn from mistakes and think carefully about the efficiency and suitability of different strategies.

4. Make connections and solve problems

Children apply their understanding to unfamiliar problems, recognise patterns and relationships, and see mathematics as connected across the curriculum and in everyday life.

5. Be prepared for future learning

Children leave with secure foundations in number, structure and relationships, enabling them to access the next stage of mathematics with confidence.

At Wynndale, mathematics develops children who are confident, fluent and reflective, ready to use mathematics purposefully in the world around them.



Mathematics @ Wynndale

Progression from EYFS to Year 6

Mathematics Progression Overview

The table below shows the progression of key mathematical knowledge and understanding across EYFS to Year 6, reflecting Wynndale's use of NCETM guidance, Oak sequencing and mastery principles.

Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number & Place Value	Count, subitise and compare quantities; compose and decompose numbers to 10; understand part-whole and the pattern of the number system.	Numbers to 20 and beyond to 100; count forwards and backwards; compare numbers; identify odd and even; use part-whole relationships.	Numbers to 100; tens and ones; count in steps of 2, 3, 5 and 10; compare, order and reason.	Numbers to 1,000; compose and decompose 3-digit numbers; represent on number lines; understand 10s and 100s; estimate and order.	Numbers to 10,000; compose and decompose 4-digit numbers; round to the nearest 10, 100 and 1,000; compare and reason.	Numbers to 1,000,000 and decimals to 3 d.p.; negative numbers; interpret and compare numbers in different forms.	Numbers to 10,000,000 and decimals; powers of 10; round and reason; apply place value understanding to calculation.
Number Facts & Fluency	Subitise to 5; recall some bonds to 5 and 10; explore doubles and counting patterns.	Secure bonds within 10; fluency in addition and subtraction facts within 10; count in 2s, 5s and 10s.	Addition and subtraction facts within 20; derive related facts; recall 2, 5 and 10 multiplication facts.	Secure mental strategies; recall 3, 4 and 8 times tables; use known facts to derive new ones.	Rapid recall of all times tables to 12×12 ; use multiplication and division facts fluently.	Use additive and multiplicative facts flexibly; fluency with factors, multiples and scaled facts.	Select efficient mental strategies; use known facts, equivalence and structures to calculate fluently.
Addition & Subtraction	Combine and separate sets; explore adding more and taking away; begin to explain what happens.	Read, write and solve addition and subtraction equations; add and subtract within 10 and 20; solve missing number problems.	Add and subtract two-digit numbers; bridge ten; use place value and related facts; solve one- and two-step problems.	Mental and written addition and subtraction with 3-digit numbers; column methods; use inverse relationships.	Add and subtract up to 4-digit numbers using efficient written and mental methods.	Add and subtract numbers with more than 4 digits; solve multi-step problems; add and subtract decimals.	Solve increasingly complex problems; choose efficient methods; use structures and algebraic reasoning.

Across the curriculum, children develop fluency, confidence and deep understanding through carefully sequenced learning.



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Multiplication & Division	Explore equal groups, sharing and doubling through practical play.	Use repeated addition; explore equal groups, grouping and sharing; count in 2s, 5s and 10s.	Represent and solve multiplication and division using arrays, grouping and sharing; use 2, 5 and 10 tables.	Recall 3, 4 and 8 tables; solve scaling and correspondence problems; begin formal written methods.	Multiply 2- and 3-digit numbers by 1-digit; divide with remainders; recall 6, 7, 9, 11 and 12 tables.	Multiply up to 4 digits by 1 digit and 2 digits by 2 digits; use short division; explore factors, multiples and primes.	Use long multiplication and division; explore common factors and multiples; solve increasingly complex problems.
Fractions, Decimals & Percentages	Share fairly and explore halves informally through practical play.	Recognise and find halves and quarters of shapes, objects and quantities.	Recognise $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$; know that $\frac{2}{4}$ is equivalent to $\frac{1}{2}$; count in fractions.	Explore unit and non-unit fractions; compare and order fractions with the same denominator; add and subtract fractions.	Explore fractions greater than 1; hundredths; decimal equivalents; compare and order fractions and decimals.	Find equivalent fractions; convert improper fractions and mixed numbers; add and subtract fractions; link decimals and percentages.	Simplify, compare and calculate with fractions; use fractions, decimals and percentages equivalence; solve percentage problems.
Geometry: Shape, Position & Direction	Recognise, name and build common 2D and 3D shapes; describe position, pattern and movement.	Recognise and name 2D and 3D shapes; describe turns and position; create repeating patterns.	Describe properties of 2D and 3D shapes; identify lines of symmetry; explore movement and direction.	Recognise right angles; identify parallel and perpendicular sides; draw and make shapes.	Measure and compare angles; identify polygons; use coordinates in the first quadrant; identify symmetry.	Measure and draw angles; reason about regular and irregular shapes; develop knowledge of position and direction.	Draw, compose and decompose shapes; solve problems involving angles, shape, position and direction.

Children revisit and connect key mathematical ideas so that learning builds securely over time.



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Measurement: Length, Mass, Capacity, Money & Time	Compare size, length, weight and capacity; use everyday language; explore time through routines and play.	Measure and compare length, mass and capacity; recognise coins and notes; tell the time to the hour and half past.	Use standard units; measure temperature; solve simple money problems; tell and write time to 5 minutes.	Measure, compare and add lengths, mass and volume; use money confidently; tell and write time; explore perimeter.	Convert between units; solve problems involving perimeter and area; read time on 12- and 24-hour clocks.	Estimate, compare and convert units; explore perimeter, area and volume; solve time and timetable problems.	Use, compare and convert units accurately; solve problems involving area, perimeter and volume; apply measure fluently.
Statistics	Sort, match and talk about what they notice.	Sort objects and simple data; ask and answer questions through discussion.	Interpret and construct simple tally charts, pictograms, block diagrams and tables.	Interpret and present data using bar charts, pictograms and tables.	Interpret charts and time graphs; solve comparison, sum and difference questions using data.	Complete, read and interpret information in tables, line graphs and timetables.	Interpret and construct pie charts and line graphs; calculate and interpret the mean.
Algebra, Ratio & Proportion	Explore patterns and relationships through play and talk.	Notice, copy and continue patterns; begin to reason about simple rules and relationships.	Use repeated patterns, sequences and number relationships.	Describe number patterns and simple rules; use scaling and correspondence in problems.	Reason about patterns and relationships; use unknowns in calculations and problem solving.	Use scaling, factor pairs and multiplicative relationships to reason mathematically.	Use simple formulae; express missing number problems algebraically; explore ratio and proportion; solve problems with two unknowns.

Across mathematics, children learn to apply their understanding in a wide range of contexts and real-life situations.