



Maths Vision & Intent

Overall Vision

At Elm Tree Community Primary School, mathematics isn't just about numbers, it's about wonder, creativity, and the joy of discovery.

At Elm Tree, our mission is to nurture confident, curious learners who see Mathematics as both exciting and achievable. We set high expectations for all pupils, while ensuring that individual needs are supported so every child can access meaningful mathematical learning.

We follow the White Rose Maths scheme, which sequences learning step-by-step across the National Curriculum. Through the CPA approach (Concrete, Pictorial, Abstract) and the Mastery Approach, pupils develop a deep understanding of key facts, methods, and concepts, making meaningful connections across topics such as number, geometry, statistics, and measurement. For some pupils Maths is delivered through continuous provision and pre-formal strategies. These hands-on, experiential activities are embedded into daily routines and tailored to each child's developmental stage, building a strong foundation for future formal learning.

We make Maths engaging, practical, and fun by incorporating gamification, interactive challenges, and games that turn problem-solving into play. Our "Going for Gold" times tables challenge helps pupils build fluency, confidence, and automaticity in recalling key facts.

Each month, pupils explore influential figures through our "Mathematician of the Month" focus, inspiring them to think like mathematicians and appreciate "the best that's ever been." Success is celebrated weekly through a "Mathematician of the Week" in each class.

To show that Maths is everywhere, we complete a "Picture of the Week" activity, encouraging Pupils to spot and discuss mathematical ideas in everyday life, from nature and art to architecture and technology.

At Elm Tree, pupils experience achievement regularly, building resilience, confidence, and a growth mindset. We work closely with parents and carers to share strategies and celebrate progress, creating a community where mathematics is valued and enjoyed.

By the end of Early years

National Curriculum

For some of our younger cohorts, it is crucial for us to support the individual needs of every child and provide appropriate and tailored mathematical learning opportunities.

Pupils working below Range 5 will be taught Maths through continuous provision and pre-formal learning strategies. This approach allows for a more hands-on, experiential, and concrete learning experience, which can better align with their current developmental abilities. During continuous provision, these pupils are provided with a range of carefully planned and structured activities that encourage the acquisition of mathematical skills and concepts. These activities are embedded within their daily routines and learning experiences and take into account their unique learning styles and needs building a strong foundation for future formal learning.

When pupils reach Range 5 they will be introduced to short teacher inputs and they will start a transition into formal Maths lessons at which point the Maths Overview and Calculation Policy should be followed.

By the end of Early Years, Pupils will have experienced

- . Develop strong number sense (subitising, counting, comparing quantities, noticing patterns).
- . Understand numbers to 10, including how they are composed ($5 + 3$, doubles, number bonds).
- . Explore shape, space and measures in practical, meaningful contexts—constructing, sorting, measuring, comparing.
- . Use mathematical language in play (bigger, smaller, more, less, next to, under).
- . Recognise and create patterns, sequences and repeated structures.
- . Talk about time, routines, positions and simple problems using everyday language.
- . Experience maths through play-rich environments indoors and outdoors.

At Elm Tree we prioritise:

Deep Early Number Sense

Foundations for future learning are built in EYFS, so we prioritise:

- Subitising
- Counting with accuracy
- Understanding “how many” through real objects
- Number bonds and early composition of number

High-Quality Mathematical Talk: Adults model clear maths vocabulary and encourage Pupils to explain, describe and reason through:

- play
- small-group/ 1-1 interactions
- open-ended questions ("How do you know?" "What do you notice?")

Learning Through Play: Pupils learn best through exploration, so we ensure:

- Maths opportunities are embedded in continuous provision
- Activities are hands-on, open-ended, and meaningful
- Pupils make connections through self-chosen play

How We Deliver This:

- Mathematics woven into daily routines (snack time counting, tidying, pattern spotting).
- High-quality continuous provision with maths invitations (loose parts, construction, small world).
- Adult-led small-group sessions using concrete resources
- Modelling and extending Pupils's thinking through sustained shared thinking.
- Outdoor maths involving space, movement, problem-solving and real-life measure.
- Regular observation and responsive planning based on Pupils's interests and developmental needs.

By the end of Key Stage 1

National Curriculum

At Elm Tree Community Primary School, our KS1 maths curriculum builds strong early foundations through White Rose Maths and the National Curriculum, ensuring Pupils become confident, curious early mathematicians.

By the end of Key Stage 1, Pupils will have experienced:

- . A secure understanding of numbers to 100, including place value, counting and comparing.
- . Early fluency with addition and subtraction facts, including number bonds to 10 and 20.
- . Experience with multiplication and division through grouping, sharing and counting in 2s, 5s and 10s.
- . Understanding of fractions as halves and quarters.
- . Familiarity with common measures (length, weight, capacity, time and money) using practical equipment.
- . Knowledge of 2D and 3D shapes, describing their properties and patterns.
- . Opportunities to create and interpret simple charts, tables and pictograms.
- . Regular chances to explore concepts through practical problem-solving and mathematical talk.

At Elm Tree we prioritise:

Firm Foundations in Number

Early number sense is crucial, we prioritise:

- . Number bonds
- . Counting fluency
- . Understanding of place value using concrete resources
- . Early times-table patterns (2s, 5s, 10s)

Talking like a mathematician

- . We teach Pupils to explain their thinking using clear, accurate vocabulary.
- . Maths discussion is encouraged daily to build reasoning from the earliest stages.

Practical, Hands-On Learning

- . To make abstract concepts meaningful, KS1 staff ensure Pupils use concrete manipulatives such as
- . Use of manipulatives (counters, Numicon, number lines, place-value grids) in every lesson in every year group

- . CPA (Concrete, Pictorial, Abstract) approach
- . Consolidation and gamification carousels to support with long term knowledge
- . Targeted support and SNAP maths interventions where needed
- . Learning about the best that's ever been
- . Picture of the week to understand maths is everywhere!
- . Outdoor learning to engage all pupils
- . Consistent models and representations across the school
- . In and outdoor targeted continuous provision to ensure Pupils have opportunities to explore and deepen their mathematical knowledge

Consistency and Small-Steps Progression

White Rose, The Elm Tree Calculation policy and experienced teachers carefully sequence steps to help us revisit concepts regularly and deepen understanding over time.

How We Deliver This

- . Daily maths lessons following White Rose small steps
- . Going for gold to support daily practice for number bonds and counting
- . Continuous access to manipulatives in every KS1 classroom
- . Practical problem-solving built into lessons and provision
- . Use of visual representations (tens frames, number lines, part-whole models)
- . Targeted support and same-day catch-up for Pupils who need it
- . Outdoor maths involving space, movement, problem-solving and real-life measure.
- . Regular observation and responsive planning based on pupils's interests and developmental needs.

By the end of Key Stage 2

National Curriculum

At Elm Tree Community Primary School, our KS2 maths curriculum follows the White Rose Maths framework and the National Curriculum, ensuring every child develops secure number skills, confidence, and the ability to reason mathematically.

By the end of KS2, Pupils will have experienced:

- . A strong understanding of place value, including numbers up to 1,000,000.
- . Confident strategies for addition, subtraction, multiplication and division, including written methods.
- . Secure knowledge of all times tables (up to 12×12).
- . The ability to compare, order and calculate with fractions, and convert between fractions, decimals and percentages.
- . Experience using and converting a range of measurements, and calculating area, perimeter and volume.
- . Knowledge of 2D and 3D shapes, angles and coordinates (all four quadrants).
- . Skills to interpret and create charts, tables and graphs.
- . Regular opportunities to problem-solve and explain their reasoning.

At Elm Tree we prioritise:

Fluency in Number

Because strong number foundations unlock success across maths, we prioritise:

- Times-table recall
- Secure written and mental methods
- Daily practice through short, focused fluency sessions

Reasoning and Mathematical Language

We explicitly teach pupils how to explain their ideas using key vocabulary. White Rose, The Elm Tree Calculation policy and specialist teachers break the learning down into small steps to support all learners.

Problem-Solving for Real Understanding

Pupils regularly apply skills in multi-step tasks, practical activities and real-life situations. We use Concrete, Pictorial, Abstract (CPA) approaches so every child can access learning.

Consistency and Progression

Using White Rose from Y1–Y6 gives pupils:

- A clear progression of skills
- Repeated exposure to core concepts
- Opportunities to deepen understanding each year

How We Deliver This

- Daily maths lessons following the White Rose small-steps sequence alongside our calculation policy
- Going for gold to support fluency
- Use of manipulatives (counters, Numicon, number lines, place-value grids) in every lesson in every year group
- CPA (Concrete, Pictorial, Abstract) approach
- Regular reasoning tasks embedded into lessons
- Consolidation and gamification carousels to support with long term knowledge
- Targeted support and SNAP maths interventions where needed
- Learning about the best that's ever been
- Picture of the week to understand maths is everywhere!
- Outdoor learning to engage all pupils
- Consistent models and representations across the school
- Continuous provision to ensure pupils have opportunities to explore and deepen their mathematical knowledge