Maths	**High View Primary** **Curriculum Overview**	

Intent

Why do we teach what we teach?

At High View Primary School, our intent is to develop confident, curious, and resilient mathematicians who understand and critically discuss mathematics. We believe that every child can achieve mastery in maths through small steps, clear progression and high-quality teaching, systematically embedding the Five Big Ideas of Mastery in our curriculum design and classroom practice. real-world contexts.

Our aims are to ensure that:

Mathematical Fluency is built through deep conceptual understanding and regular practice, enabling children to recall and apply knowledge efficiently and flexibly.

Coherence is maintained by carefully sequencing lessons so that each small step builds on prior learning and supports future understanding, ensuring no child is left behind.

Mathematical Thinking is nurtured through rich questioning, discussion, and reasoning tasks that encourage children to make connections, spot patterns, and justify their ideas.

Representation and Structure underpin our use of models and images that reveal mathematical relationships and support all learners in accessing abstract concepts.

Variation is applied both conceptually and procedurally to help children develop a comprehensive understanding of mathematical ideas, enabling them to apply their knowledge in a range of contexts.

Our curriculum is designed to reflect our whole-school vision: *every child can achieve through high expectations, small steps, and an inclusive mastery approach*. Carefully sequenced lessons ensure that new learning builds on secure foundations and prepares pupils for future concepts. The curriculum is structured to develop both substantive knowledge (mathematical facts, methods, and concepts) and disciplinary knowledge (reasoning and problem solving).

Our inclusive, adaptive teaching approach ensures that all pupils, regardless of background or starting point, develop the mathematical knowledge and confidence they need to succeed—both in the classroom and in the wider world through an individualised adaptive approach and high-quality first teaching.

We aim to ensure that all children:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that they have conceptual understanding and can recall and apply their knowledge rapidly and accurately to problems.

- **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.

Implementation

How do we teach what we teach?

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background,to flourish into the best version of themselves. Maths at Key Stage 1 and Key Stage 2 builds on the Early Learning Goals for Mathematics within the EYFS.

Our inclusive approach is based on the use of concrete resources, pictorial representations and abstract methods to help pupils develop a secure and long-lasting understanding of maths and helps teachers effectively plan in line with our whole school approach.

Maths is taught daily in all years from N to Year 6, with a focus on arithmetic at least once a week. We expect maths to be recorded at least 3 times per week in books, allowing for the teaching of arithmetic and one practical lesson. Arithmetic lessons are informed by teachers completing a gap analysis and ensuring they recognise areas for developments.

Concrete resources are also highly valued and will always be accessible to all pupils.

We want to encourage our children to be independent learners and to recognise concrete or pictorial representations that will support them.

The Concrete, Pictorial, Abstract (CPA) approach aim to ensure that mathematical ideas are presented in ways that are meaningful and accessible, the progression of which is outlined in our calculation policy:

Concrete representation: Children are first introduced to an idea or skill by using physical manipulatives such as counters, base ten blocks, fraction rods etc. This is a ‘hands-on’ component using real objects and is a foundation for conceptual understanding.

Pictorial representation: Children have sufficiently understood the ‘hands-on’ experiences performed and can now relate them to representations, such as a diagram or picture of the problem.

Abstract representation: Abstract is the ‘symbolic’ stage, where children are able to use abstract symbols to model and solve maths problems. Children will not progress to this stage until they have demonstrated that they have a solid understanding of the concrete and pictorial stages of the problem. The abstract stage involves the teacher introducing abstract concepts (for example, mathematical symbols).

Every classroom has a working wall which reflects the current learning. It is accessible to the pupils and includes mathematical vocabulary. The working wall should include models and representations that are presented in our calculation policy.

When planning a unit, teachers use a range of resources and areas to support and structure their overviews but ensure representations and vocabulary follow our calculation policy and unit progression document. We

primarily use the “White Rose Maths” scheme to support teachers in having a clear, small steps progression to ensure that our curriculum is designed in a way that will allow children to build on their knowledge unit by unit, and year by year. The progression begins by securing place value and number at the start of the year, in all year groups, and then moves on to other areas of maths in which these number skills will be used. By starting with Number, we ensure that we emphasise arithmetic early on, and can use this to inform the rest of the year.

Developing mathematical vocabulary is central to our teaching. Teachers explicitly introduce and model the correct use of subject-specific language, ensuring that children understand and can confidently use mathematical terminology in context.

- Key vocabulary is displayed and referred to on working walls and within lesson slides.

- Teachers use stem sentences and structured discussion to encourage reasoning and precision in mathematical talk.

- Children are expected and encouraged to use the correct vocabulary when explaining their thinking, supporting both conceptual understanding and effective communication.

We have high expectations for all learners.

- **Support** is provided through adaptive teaching, targeted questioning, the use of manipulatives, scaffolding tasks, and small-group intervention. Teachers carefully adjust the level of structure or representation to enable all pupils, including those with **SEND** and **disadvantaged pupils**, to achieve the same learning objective.

- **Challenge** is achieved through deepening tasks reasoning, investigation, and problem-solving opportunities rather than acceleration. Children are encouraged to make connections, justify their thinking using precise mathematical vocabulary, and explore multiple methods or generalisations.

In EYFS

Children participate in regular maths sessions and are given time to explore mathematical concepts and practice taught skills through play.

In Nursery, children develop a love of maths through games, songs, rhymes, and play using concrete manipulatives. There is a focus on three of the counting principles:

- **The one-to-one principle;** this describes the necessity to count each item in a group only once. When we count, we assign one distinct name to each number. Children need a lot of practice doing this, because they have a tendency to:
    - Skim – Children may count too quickly and miss out an object.
    - Flurry – Children may count an object more than once.
- **The stable order principle;** this is the idea that the names of numbers should be said in the correct order, and that the order of those numbers will not change.
- **The cardinal principle;** this is the understanding that the final number said when counting tells you how many objects are in that group.

In Reception, children continue to work on the first three counting principles as well as;

- **The abstraction principle;** this is the idea that we count everything in the same way, no matter what it is. Anything can be counted, from physical things to things that can’t be touched.

- **The order irrelevance principle;** this is the understanding that the order in which objects in a group are counted is not important. The number order does not change just because the counting order does. However, this principle only rings true if all the other principles are followed.

In Year 1
The active learning style of the Early Years provision has been developed to extend into Key Stage 1 through continuous provision. The children have a daily maths input and continue to access maths learning both inside and outside, using a free-flow model. Each week, children complete one focused activity with the class teacher. During this session, the teacher assesses the children's understanding of key mathematical concepts and encourages them to explain their thinking using appropriate mathematical vocabulary.

In KS1 and KS2

We follow a maths mastery approach, creating task sheets for pupils to access their learning journey that starts with Fluency before moving onto a fluency challenge, then pupils have the opportunity to reason before completing a reasoning challenge and end with problem solving.

In years 2-4, pupils complete fortnightly timetables tests in preparation of the MTC in year 4 but also to make it into our 144 club. Pupils are expected to know all times tables to 12 x 12 by year 4 so any pupil who do not know them by year 4 will continue to practise fortnightly up until year 6 and pupils who are able to recall all of their times tables try to enter the 144 clubs, in which they have to recall 144 questions in 5min and then every fortnight they aim to beat their time.

To further increase pupils' fun and engagement pupils use Doodle Maths (an online and fun learning platform that tailors learning to individual needs) to complete home learning and we celebrate pupils who log in every day.

The maths subject leader carries out monitoring and evaluation of the subject which is reported to governors and informs actions plans and Staff CPD.

In lessons, teachers use formative assessment to help decide on what they should do next with pupils and the progress they are making. This allows us to understand how to support and extend our pupils appropriately. Every piece of learning in books is marked and misconceptions addressed. This will consist of the teacher facilitating marking in the moment (live marking), pupil self marking, verbal feedback or distance feedback. (Please refer to the marking policy for more details).

Impact

How do we know what pupils have learnt and how they have learnt it?

At High View Primary School, we strive for our children to become fluent, competent and efficient mathematicians. Children will be able to recall facts and procedures, including the recollection of times tables. Furthermore, we encourage children to recognise relationships in maths by clearly explaining their reasoning and justifying their thought processes. 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.

The school's approach to teaching maths, beginning in the Early Years and extending through Key Stage 2, fosters a strong, positive mathematical foundation and promotes long-term engagement and progress.

In Nursery and Reception, children build a deep conceptual understanding of Number through songs, games, play, and hands-on resources. The focus on core counting principles—such as one-to-one correspondence, stable order, cardinality, abstraction, and order irrelevance—ensures that children develop secure early number sense in a developmentally appropriate, enjoyable way.

This play-based, active learning approach is extended into Year 1 through continuous provision, supporting a smooth transition from the Early Years into Key Stage 1 and maintaining high engagement. Children continue to explore maths concepts in practical, meaningful contexts, both indoors and outdoors.

From Key Stage 1 into Key Stage 2, the maths mastery approach deepens pupils' understanding by structuring learning into clear phases: fluency, reasoning, and problem solving. This progressive model enables all learners to access, practise, and apply mathematical concepts with increasing independence and confidence, using a range of adaptive techniques so that all pupils can access the learning. Where a pupil is working significantly lower than the rest of the cohort, tasks are differentiated to meet their needs, although we encourage staff to link to the mathematical strand that is the focus for the whole class.

Every term pupils in years 2-6 (and Summer term in year 1) also sit a standardised test so that gaps can be analysed on a class, year group and phase level. These assessments address the three key elements of the curriculum; fluency, reasoning and problem solving and are used to inform future planning and to support teacher judgements. Pupils also complete End of unit assessments for each mathematical unit, which also informs termly interventions.

Regular times tables practice in Years 2–6, including the aspirational 144 Club, builds quick recall and prepares pupils well for national assessments, while also encouraging self-challenge and celebration of success.

Use of Doodle Maths for home learning adds a fun, tech-based element that supports daily practice and reinforces school learning in an engaging way.

Ongoing monitoring by the maths subject leader, including CPD for staff, gathering pupil voice and termly reports to governors, ensures consistency, accountability, and continual improvement across the school.

At High View, our curriculum equips children with the confidence, curiosity, and resilience to persevere when faced with challenge. Through engaging and meaningful learning experiences, pupils develop self-belief in their ability to reason, problem-solve, and think creatively. They take responsibility for their learning, showing determination and independence as they apply their mathematical understanding to real-life situations. As a result, the aim is for children to leave High View with a secure foundation of mathematical knowledge and the confidence to use it beyond the classroom. Their journey in maths reflects our school vision – an exciting and memorable experience where every child thrives and becomes the greatest version of themselves.

Link to other documents / appendices:
Maths calculation policy
Maths pacing and progression
Marking policy
Presentation policy
Maths generalisations and vocabulary progression