

Mathematics Policy

Aims

At Crudgington Primary School, our long-term aim is to produce an ambitious, connected curriculum that is accessible to all pupils. Carefully sequencing the mathematical knowledge and skills to ensure our pupils are prepared for their future school years, embedding in them confidence and curiosity within mathematics. We want our pupils to become fluent in the fundamentals of mathematics and to be able to reason and problem-solve.

Our curriculum embraces the national curriculum aims, with the national curriculum objectives used as the starting point for our long-term plans and schemes of work. The Ofsted research review, published in May 2021, provided further guidance and support in how our schemes of work and lesson structure ensure progression within mathematics.

Our pupils should:

- Have a sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- Use what they know by heart to calculate numbers mentally
- Calculate accurately and efficiently, both mentally and with pencil and paper, drawing on a range of calculation strategies they have been taught
- Recognise when it is appropriate to use a calculator and be able to do so effectively
- Make sense of number problems, including non-routine problems, and recognise the operations needed to solve them
- Explain their methods and reasoning using the correct mathematical terms and vocabulary
- Assess whether their answers are reasonable and have strategies for checking them if necessary
- Suggest suitable units for measuring and make sensible estimates of measurements
- Explain and make predictions from data found in graphs, diagrams, charts and Tables (statistics)
- Develop spatial awareness and an understanding of the properties of 3D and 2D shapes (geometry)

The governing body should, in cooperation with the Headteacher and subject leader, know key strengths and development points in the subject and take part in the monitoring of books.

The Mathematics coordinators should advise the Headteacher, staff and governors of current practice in Mathematics and any new initiatives put forward by the government which may require amendments to this policy.

Practice

Our scheme of work has been developed to enable key strands of maths to spiral and be revisited across the year. Our aim has been to create a **cumulative curriculum**. So that once a strand has been taught, it is revisited again in other contexts. For example, place value is the foundation for all year groups, which is then revisited again during our calculation strands.

Number Sense

We understand the need to embed a secure understanding of number in the Early Years. Our Number Sense scheme aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 1 and Year 2. This programme will develop solid number sense, including fluency and flexibility with number facts, which will have a lasting impact on future learning for all children.

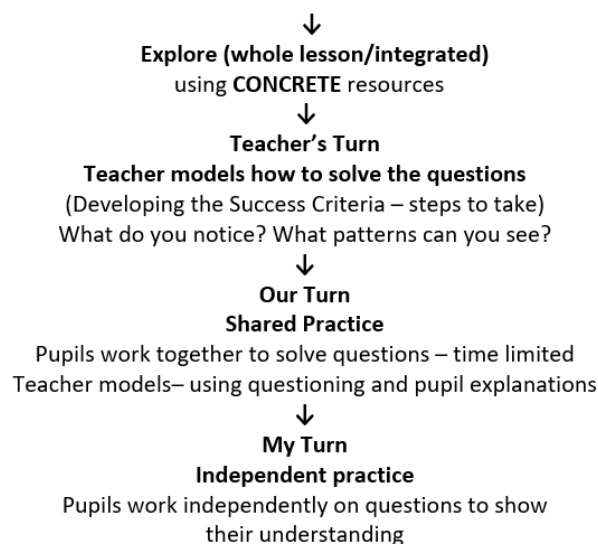
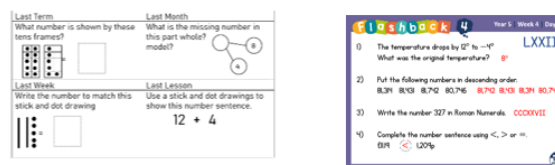
	Early Years Number Sense	Number Facts Fluency	Times Tables Fluency
For	Reception	KS1 and beyond	KS2 and beyond
Aim	<ul style="list-style-type: none"> Deep understanding of quantity and numbers to 10 Key elements of EYFS framework 	<ul style="list-style-type: none"> Fluency in addition and subtraction facts Confidence and flexibility with number 	<ul style="list-style-type: none"> Fluency in multiplication and division facts Understanding of multiplicative relationships

Teaching and Learning

Maths lessons take place daily in all classes. Lessons are stimulating and exciting and allow children to learn, practice and apply new skills and knowledge in a range a range of activities. We have a lesson structure in place, which focusses on the principles of reviewing learning, modelled examples and shared practice:

Daily Review

Last Term, Last Month, Last week, Last lesson
White Rose- Flashback 4



Assessment

Assessment is regarded as an integral part of teaching and learning at Crudgington Primary School and is a continuous process. We are constantly assessing our pupils and recording their progress, in line with the school's assessment policy. We strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the children and ensuring progress.

Pre and post unit assessments are carried out, to ensure that lessons are pitched accurately and gaps in learning are closed.

Intervention groups

Termly pupil progress meetings, and regular formative assessment identifies which children would benefit from interventions. Within mathematics, we use a same-day intervention approach, ensuring we identify gaps in learning before they widen. In addition to these interventions, we run a KS2 Number Sense group, Catchup Numeracy programme and Times tables interventions.

SEN

Our mathematics curriculum has been designed to meet the needs of all pupils. Our approach is underpinned by the Principles of Instruction, following a mastery approach. By introducing new learning in small steps, with clear modelling and questioning, and appropriate scaffolds used, the aim is for all pupils to access the curriculum and be successful. We use a Concrete Pictorial Abstract (CPA) approach in our mathematic lessons, where our pupils have access to a range of manipulatives to support their learning.

Monitoring

In line with the teaching and learning policy and monitoring cycle, a deep dive in Mathematics takes place each term. As part of this process, lesson visits, book looks, discussions with pupils and staff, will provide a clear understanding of the strengths and areas for development. The mathematics coordinator will use these areas for development to form a subject leader action plan which coincides with the whole school ADP.

Homework

Homework is set in line with the homework policy and is set on Friday and handed in on Wednesday. Fluency questions, linked to current learning are set, alongside times table practice. Times tables are tested each fortnight on Times Table Rockstars.

Parental Engagement

Parents and carers are regularly informed of their child's progress, through termly parent consultation meetings or pupil reports. If a pupil requires support with their learning, and interventions take place, we will discuss this with parents, and regularly feedback on the progress of these sessions.

Parental workshops for mathematics take place termly for each class, to share the calculation strategies which are taught. In addition to sharing the agreed calculation strategies, a range of reasoning and problem-solving activities are used to engage and encourage our parents to support their child's learning at home.