Highcliffe St Mark Primary School
Maths Curriculum Overview

Subject Rationale- What does maths mean for the children at our school? Why do we teach what we teach at our school? We believe that every child can develop the skills and knowledge to think and reason as a mathematician. Using a mastery approach, carefully sequenced learning, using small connected steps and rich opportunities for discussion, our vision is for pupils to gain deep, lasting understanding to solve problems with flexibility and efficiency.

Aims

EYFS curriculum

Develop a strong grounding in number, e.g. counting, having a deep understanding of the numbers 1-10, including the relationships between them and patterns.

Use spatial reasoning skills, including space, shape and measure.

Look for patterns about what they notice.

National Curriculum—KS1 and KS2 Aims

Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

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.

Skills Progression

EYFS

See EYFS Framework EYFS statutory framework for group and school-based providers and Progression of Knowledge and skills documents Maths | Highcliffe St Mark Primary School

KS1

See National Curriculum: Mathematics programmes of study: key stages 1 and 2 (publishing.service.gov.uk)

See separate Calculation Policy, National Curriculum and Ready to Progress Mapping, Whole School Progression of Knowledge and Skills documents Maths | Highcliffe St Mark Primary School

KS2

See National Curriculum: Mathematics programmes of study: key stages 1 and 2 (publishing.service.gov.uk)

See separate Calculation Policy, National Curriculum and Ready to Progress Mapping, Whole School Progression of Knowledge and Skills documents Maths | Highcliffe St Mark Primary School

The Curriculum Sequence

EYFS

See EYFS Framework EYFS statutory framework for group and school-based providers and Progression of Knowledge and skills documents Maths | Highcliffe St Mark Primary School

KS1

See National Curriculum: Mathematics programmes of study: key stages 1 and 2 (publishing.service.gov.uk)

See separate Calculation Policy, National Curriculum and Ready to Progress Mapping, Whole School Progression of Knowledge and Skills documents Maths | Highcliffe St Mark Primary School

KS2

See National Curriculum: Mathematics programmes of study: key stages 1 and 2 (publishing.service.gov.uk)

See separate Calculation Policy, National Curriculum and Ready to Progress Mapping, Whole School Progression of Knowledge and Skills documents Maths | Highcliffe St Mark Primary School

Teaching for Mastery

Our approach is underpinned by the NCETM's Five Big Ideas for Teaching for Mastery, which includes: coherences, representation and structure, mathematical thinking, fluency and variation.

Five Big Ideas in Teaching for Mastery | NCETM

Assessment

Formative assessment by the class teacher through observations, questioning, maths talk and recorded work. Formative assessment informs future teaching and lessons. Retrieval tasks are used to assess the retention of previously taught content. Summative assessment is used on a termly basis to assess the children's confidence in fluency, reasoning and problem solving.

SEND

Scaffolding, part-worked examples, same day intervention, overlearning, pre-teaching, counting stick, Plus 1 and Power of 2.

Links Across the Curriculum

Links to everyday life and subjects across the curriculum are made. Links are also made during whole school events, e.g. STEM Week, particularly with statistics, spatial reasoning, measure and angles.

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Experiencing Maths

Subject Enhancements

How do children experience maths in different contexts e.g. real life, trips, visits, their immediate environment

EYFS

Maths working walls

Access to manipulatives

Forest School

Continuous provision

KS1

Maths working walls

Access to manipulatives

Forest School

TTRS celebration assemblies

KS2

Maths working walls

Access to manipulatives

Forest School

TTRS celebration assemblies

Resources and Texts

What are the key resources that the children will encounter and explore throughout their time in our school?

EYFS

White Rose Maths

Manipulatives and representations

NRich

Number Blocks

White Rose 1 Minute Maths

NCETM

Numbots

KS1

White Rose Maths

Manipulatives and representations

NRich

Number Blocks

White Rose 1 Minute Maths

Numbots and TT Rockstars

NCETM

Mathletics

KS2

White Rose Maths

Manipulatives and representations

NRich

White Rose 1 Minute Maths

NCETM

Numbots and TT Rockstars

Mathletics

Maths talk and vocabulary

The Essence of Mathematics Teaching for Mastery | NCETM

The intention of teaching for mastery is to give all pupils (including those with SEND) access to equitable classrooms; classrooms where pupils can all participate and be influential, and classrooms where pupils are encouraged and supported to develop a deep connected and sustained understanding of the mathematics being explored. (NCETM)

Mathematical vocabulary is explicitly taught and modelled by adults. Sentence stems are used to support the children's mathematical talk and develop their thinking.