

Stanion C.E Primary School

Maths Policy



Introduction

We aim to be a nurturing, inspiring school where all are enabled to achieve their best. Each child should know that they are valued for their individual worth. They should develop a mutual respect of others based on acceptance and trust. The school aims to serve its community by developing close links and by providing an education of the highest quality by developing the whole child within the context of Christian belief and practise.

'Love your neighbour as yourself' (Matthew 22:39)

Aims

At Stanion, we aim for all learners to be engaged in their Maths lessons. We want all learners to enjoy maths and be challenged by it. We recognize resilience and perseverance as key to solving problems and learning new strategies. We value the mistakes that learners make as part of the learning process and aim to develop a growth mindset in our learners. Learners are encouraged to review their own work and are taught that mistakes in their work are a positive thing.

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to 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.

Planning

We ensure the National Curriculum and EYFS framework requirements are met through a broad and engaging learning experience. We challenge pupils with rich and sophisticated problems from a range of sources. We use White Rose mixed aged resources, NRICH and NCETM materials as well as and Problem Solving resources. We use CGP for fortnightly reasoning lessons and Rising stars for fortnightly arithmetic. Word problems and investigations provide context in a range of areas to raise the profile of Maths as a career choice and the importance of a good understanding of Maths. Pupils from disadvantaged backgrounds benefit from lessons which include a range of real life contexts. We link Maths and Global Citizenship to build real life links between Maths and the wider world. We ensure that our termly Maths challenges provide both real-world Maths opportunities and targeted areas for development.

The calculation policy and mental maths policy are implemented in all year groups to ensure a progression of core knowledge and to provide children with the opportunities to become number fluent. A skills policy ensures a progression of the core maths skills: imaging, expressing, organising, classifying, conjecturing, convincing, specialising and generalising. Long term knowledge is built through revisiting of the key areas throughout the year and across the key stages. We ensure that the children regularly revisit number bonds, times tables and arithmetic skills throughout their school journey. New knowledge builds on the knowledge of the previous year and the methods and resources are used across year groups where appropriate. Representations are revisited across year groups with the context and content being adapted as appropriate.

Learner aspirations are raised through these opportunities and regular whole school problem solving days. Whole school Maths challenges encourage pupils to explore cross-curricular maths and support parents with implementing everyday maths at home.

We develop our learners' culture capital through the exposure to different cultures, global awareness, historical context and the use of quality discussion to form opinions and challenge stereotypes within these areas. The school learning behaviours: Community Cam, Engagement Eric, Independent India, Mindful Mo and Possibilities Parker are taught and rewarded within lessons. These develop the emotional intelligence desirable in the work place and support learning in all subjects. Learning is shared in weekly celebration assemblies and through the school newsletter. Termly class assemblies allow learners the opportunity to share their work with others.

Long term plans identify the areas of Maths that will be taught in each term along with any possible links across the Maths curriculum. Assessment objectives are mapped onto the LTPs for KS1 and KS2. Medium term plans are then produced by breaking down the objectives into smaller steps. Medium term plans identify the weekly objectives to be covered across a term along with any opportunities for linked learning and revisiting of the curriculum. Weekly plans using White Rose Schemes of Learning to identify opportunities for investigation and assessment. They are working documents annotated by staff to note progress and areas to reteach as well as annotating medium term plans to show the small steps that may need to be revisited.

Daily planning is through the Whiterose plans and teaching slides. Non Negotiables must be included:

- LI and small steps to success.
- Key vocabulary to be discussed/taught.
- Revisit of prior learning (Flashback 4).
- New learning through a range of representations.
- Identification of resources to be used to support.
- Key questions
- Impact
- Independent tasks
- Differentiation (including challenge)

In Reception, planning follows the LTP and is adapted from the White Rose scheme of work. More opportunities for the use of outside area is planned in as well extending the learning in the summer term to better prepare the children for year one. Adaptation varies depending on the cohort of children and their needs.

Weekly planning is taken from either the White Rose scheme of work and adapted to meet the needs of the cohort. Two lessons a week have whole class teaching and guided group tasks. The rest of the week consists of independent tasks.

EYFS

Teachers support children in developing their understanding of problem solving, reasoning and numeracy in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. Teachers offer opportunities for these skills to be practised, in order to give children confidence and competence in their use.

These Areas of Learning and Development include seeking patterns, making connections, recognising relationships, working with numbers, shapes, space and measures, and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other Areas of Learning and Development. Mathematical understanding will be developed through stories, songs, games and imaginative play.

Teaching and Learning

Over a series of lessons, there should be:

- Opportunities to revisit prior learning will be provided through a daily review (Flashback 4).
- Development of fluency through practise and the use of different representations and models.
- Use of whole class choral counting (where appropriate).
- Explicit teaching of mental strategies.
- Development of reasoning through problem solving, looking at misconceptions, intelligent practise and questioning.
- Opportunities for exploratory talk through a range of contexts including the use of talk partners and group roles.
- Teachers modelling their thinking out loud.
- Pupils are given opportunities to explain teachers' reasoning and misconceptions.
- Modelling and pupil use of the correct terminology.
- Opportunities to use and develop the Maths Super Powers.
- Progression through the targets for the correct year group.
- Learning is broken down into small connected steps.
- Scaffolding is used in the forms of thinking out loud, cue cards and checklists.
- Mini plenaries are used to check pupil understanding.
- Misconceptions are identified and explored.
- Support in place for those who are struggling.
- Differentiation supports the cognitive load and challenges pupils.
- Plans for moving pupils away from resources and scaffolds for support across the lesson sequence.
- Pupils not always working in set ability groups.
- Use of concrete and pictorial resources to reveal structure detailed in the calculation policy.

We build pupils' vocabulary through the teaching of subject specific language and the use of talk within lessons. Vocabulary is displayed within classrooms and knowledge mats in books are also used so that all learners can articulate their ideas. Learners use verbal reasoning and communication skills within their problem solving and work is often collaborative.

Assessment and Record keeping

Assessment is continuous and ongoing.

Frequency	Ideas
Individual lessons	<ul style="list-style-type: none"> • Revisiting of sticky knowledge through tasks • Differentiated activities to support and stretch • Tapestry • Annotated planning • Supported work identified in books. • Self-assessment and evaluation.
End of unit	<ul style="list-style-type: none"> • End of strand formal assessment. • Problem solving challenges • Bsquared – used to identify steps for intervention.
Assessment week	<ul style="list-style-type: none"> • White Rose/SATS paper assessments and pupil progress meetings • Moderation of books.
	<ul style="list-style-type: none"> • End of Key Stage SATs take place in Years 2 (optional) and 6.

Reception children are baseline assessed at the start of the year and their Early Learning Goals profile is updated throughout each term. Tapestry is used to collect and store evidence for all pupils. Evidence is tagged to the Early Learning Goal and builds an assessment profile for each child. Weekly assessment sheets are completed for every child for the Learning Goal covered in that week. These are stored with each child's profile document.

Children not making progress are supported in class and through intervention. They may need re teaching or extra practise. Where possible this will be provided the same day, before the next Maths lesson. Where gaps in learning are identified, CGP and White Rose materials are used for intervention. Interactive resources may also be used to support number sense gaps and fluency.

Greater depth learning/Mastery means that pupils can solve a range of problems within an area of the maths curriculum that have different representations, contexts or models. They are able to use their own models and representations as well as explain their choices. They can identify and explain misconceptions and generalise rules. Pupils may be greater depth for one area of the maths curriculum and not for others. To judge a pupil at greater depth, this should be a best fit judgement.

Computing

Opportunities to use Computing to support teaching and learning in Maths will be planned for and used appropriately. These include, interactive games, TT Rockstars, Numbots and many of our computing units.

Home/school Link

We aim to develop our wider Maths community and promote the fundamental British Values through parents being invited to attend whole school maths events and solve whole school maths challenges.

Tapestry is used to share current Maths objectives being taught and covered at school along with useful links to support learners at home. Learners have access to Times Tables Rock stars at home from Year 2 upwards and NumBots from Reception upwards. Homework is set in KS1 and KS2 as appropriate. There is an expectation that all children in KS2 access timetables practice each week. Parents evenings are held twice a year where Maths progress and targets are discussed and a written report is sent home once a year. Termly Maths challenges are set to the whole school to boost engagement in Maths at home.

Presentation

Books

- All pieces of work include a short date and a learning intention in the form of a question.
- Work is presented neatly with one number in each square.
- There is evidence of deepening of learning through a variety of representations of problems.
- There is evidence of the use of a range of mathematical skills such as problem solving, fluency and predicting. This may also be on Tapestry.
- There is evidence of the use of concrete and pictorial support being used by pupils to support where needed.

- There is evidence of a range of contexts including real world opportunities.
- Photographic evidence and observations to be recorded on Tapestry.
- Challenges are provided within lesson time.
- Corrections are marked with a green spot with written feedback where appropriate.
- Children in KS2 are encouraged to self-mark with a blue pen.

Displays

- Have the mathematical behaviours on the board
- Should model concrete and pictorial resources to support learning
- Should include key vocabulary to support learning

Inclusion

We aim to meet the needs of all, taking into account gender, ethnicity, culture, religion, language, disability, sexual orientation, age and social circumstances.

SEND

We aim for all learners to make expected progress from their starting points and use targeted intervention to support this if needed. All learners, including SEND pupils, benefit from the use of good quality concrete and pictorial resources to deepen understanding and support their progression.

We aim for the majority of our learners to move through the program of study at broadly the same pace. Differentiation is provided through the use of concrete and pictorial resources, scaffolding of tasks, use of mastery questions to deepen thinking, displays and prompts within the classroom, acceleration through tasks, outcomes, the amount of support and guidance to complete tasks, the use of peer support and pre-teaching. Those who are not sufficiently fluent with earlier material may undertake a revised program of learning to consolidate their learning, including through additional practise, before moving on.

Learners are encouraged to evaluate their needs and select levels of support that are appropriate for them. Groupings for differentiation are fluid where pupils are completing work with the appropriate level of support for their ability in that lesson for that particular Maths topic. Learner gaps are closed within lessons and through targeted intervention. This can be informal or through a program of intervention identified on provision maps. We recognise that differentiation through support and challenge are the most beneficial for children when using a mastery approach.

Monitoring and Evaluation

Monitoring and evaluation of Mathematics teaching in the School is carried out by the Mathematics Co-ordinator and the Head teacher. When possible discussion with children will take place along with scrutiny of work.

Role of the Subject Leader

The subject leader will be responsible for improving standards of teaching and learning in Mathematics through:

- Monitoring of Pupil progress
- The quality of the learning environment
- Taking the lead in policy development
- Auditing and supporting colleagues in their CPD
- Purchasing and organising resources
- Keeping up to date with Numeracy developments

Mr C Forsyth

Mathematics Lead

Review

The governing body reviewed this policy on Tuesday, 16th December 2025

Review Date – December 2026

Signed _____

Headteacher

Signed _____

Chair of Governors