



'We can and we will'

GLEBE PRIMARY SCHOOL

MATHS POLICY

Mission Statement:

At Glebe School, we believe in an ethos that values the whole child. We strive to enable all children to achieve their full potential academically, socially and emotionally.

Statement of Philosophy

"We, at Glebe Primary School, believe that mathematics is a body of knowledge which provides a way of viewing and making sense of the world. It is also a powerful means of developing self-esteem, communication, confidence and cooperation. We acknowledge that mathematics is an essential tool for everyday life and a subject worthy of study in itself."

Aims and Objectives

- To foster enjoyment and enthusiasm for learning through practical activity, exploration and discussion;
- To develop mathematical fluency;
- To fulfil the national curriculum mastery requirement, according to the child's ability;
- To raise mathematical achievement;
- To promote school and community links through shared mathematical experience;
- To give all our children equal access into the mathematics curriculum and resources regardless of race, ability, age, sex or disability;
- To use mathematical language with ease and understanding as a form of communication;
- To develop pupils' self-confidence in their mathematical ability;
- To encourage children to think and reason for themselves;
- To give children the opportunities to work in a variety of mathematical situations.
- To develop mathematical problem solving skills that can be transferred to a variety of situations.

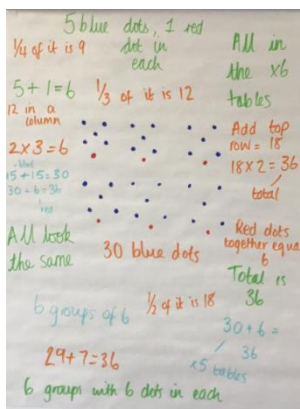
Teaching and Learning Styles

The school uses a variety of teaching and learning styles in mathematics lessons. Our principal aim is to develop children's knowledge, skills and

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understanding in mathematics. We do this through a daily lesson which may involve whole-class and or group teaching. During these lessons, we encourage children to ask as well as answer mathematical questions. They have the opportunity to use a wide range of concrete resources such as number lines, number squares, digit cards and small apparatus to support their work. Children use ICT in mathematics lessons where it will enhance their learning, as in modelling ideas and methods. Wherever possible, we encourage the children to use and apply their learning in everyday situations.

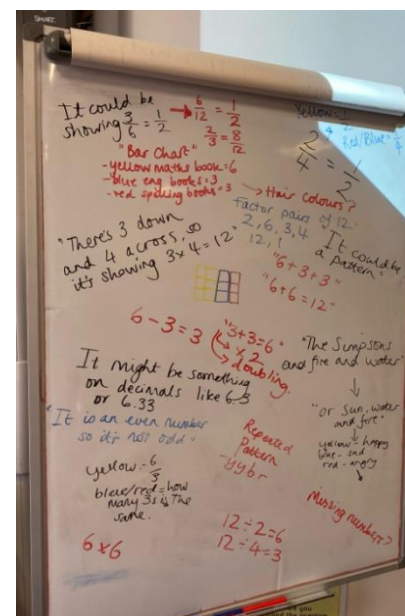
Number Talks



Number Talks is an approach to developing facility with computation, that engages children in thinking about numbers and allows them to add, subtract, multiply and divide using the mathematics that is meaningful to them.

The typical steps for a number talk are:

- Present an expression or problem for pupils to solve mentally.
- Allow adequate "wait time" for most students to come up with an answer. Pupils can signal with a thumbs up when they have solved the expression.
- Initially, invite pupils to share their answers only, not their solutions.
- Then ask for pupil volunteers to share how they solved the problem.
- For each pupil who shares their solution strategy, chart their thinking on the board. Make sure to accurately record their thinking; do not shape or correct their response.
- Have several pupils who used different strategies share their thinking with the class.
- Invite pupils to question each other about their strategies, compare and contrast the strategies, and ask for clarification about strategies that are confusing.



Inclusion

In all classes, there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. To ensure that each child is being challenged and working at the edge of their knowledge, tasks are clearly differentiated with the opportunity for continued progression, ensuring there is no ceiling or barriers to potential learning. To encourage logical thinking, children follow the 6 B's rule in class – these are designed to encourage self-reflection and stimulate independent reasoning.

- **Brain:** Read the question. What is it asking you?
- **Book:** Look back through your book. Is there previous feedback or success criteria that can help answer this problem?

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- **Bits and Bobs:** Are there any concrete resources that would help answer this problem?
- **Board:** Look at the working wall. Are there any clues or hints?
- **Buddy:** Ask a friend, do they have any advice that could help you?
- **Boss:** Ask an adult in class for guidance.



Daily mathematics lessons are inclusive to pupils with special educational needs and disabilities. Where required, children's SEN support plan incorporate suitable objectives from the National Curriculum for Mathematics or development Matters and teachers keep these in mind when planning work. These targets may be worked upon within the lesson as well as on a 1:1, or group basis outside the mathematics lesson. Maths focused intervention in school helps children with gaps in their learning and mathematical understanding. All staff from years 1 to 6 are trained in the Numberstacks intervention which is a clear maths support programme with staged activities moving from concrete resources to mental and written methods of calculation. These are delivered by trained support staff and overseen by the Special Needs Coordinator (SENCO) and/or the class teacher. Within the daily mathematics lesson teachers have a responsibility to not only provide differentiated activities to support children with SEND but also activities that provide sufficient challenge for children who are high achievers. It is the teachers' responsibility to ensure that all children are challenged at a level appropriate to their ability.

Planning

Mathematics is a core subject in the national curriculum and we use the national curriculum as the basis for planning and implementing lessons.

We carry out the curriculum planning in mathematics in two main phases: long-term and short-term. The Mathematics Programmes of Study (National Curriculum) provides the long term framework and we use the Progression in Mathematical Understanding (PUMA) medium term plans to inform our short term planning.

It is the class teacher who completes the weekly plans for the teaching of mathematics. We do not follow one scheme of work – instead the teacher tailors lessons to the specific need of his/her pupils utilising resources from a wide variety of schemes such as: White Rose, Diagnostic questioning, Classroom Secrets, Test-base, I See Reasoning, Target Maths, etc.) Planning should be fluid – with the flexibility to ensure each child is challenged and stimulated.

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Reasoning and problem solving should be incorporated into every lesson. Children's progress should be monitored during lessons with written and verbal feedback. Fluency should only be a small part of the lesson. All children should be attempting reasoning and problem solving differentiated to their ability level. It is therefore important, that teachers liaise with colleagues and the maths lead to ensure each child is challenged sufficiently.

Glebe Challenge

Children begin to complete Glebe challenges weekly from Year 1 upwards. Mental maths involves completing short mathematical problems without the use of a pen and paper or a calculator. It is not only useful in school, but in everyday life, such as working out change; sharing items between a group of people and working out when to leave in order to arrive at the correct time.

Mental maths can be used in place of more formal methods. For example, what is $47 + 65$? It's easier to do this in your head if you break the numbers down into their digits' values: $40 + 60 = 100$ and $7 + 5 = 12$. Add those two totals and you get the answer of 112.

Improving mental maths skills is a priority of ours at Glebe. Exercising mental maths skills helps to exercise both sides of the brain and has been strongly associated with better memory skills.

To aid with exercising our mental maths skills, every week, the children undertake a Glebe Challenge. This involves the children completing a sheet of mental maths problems within a 5-minute time frame.

EYFS

Children in Nursery and Reception are taught maths through a mix of play based and focused learning opportunities. Maths can be found running through all areas of the EYFS curriculum, not just within our explicit numeracy lessons. The teaching of maths in the EYFS involves providing children with fun, carefully planned and well taught opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces and measures in simple terms. Maths is one of the targeted areas within the outdoor learning area, with many opportunities for the children to explore, develop and consolidate their learning and deepen their understanding of mathematical concepts.

In Reception, we follow the NCETM Maths Mastery Programme, along with planning for the needs of the current cohort. The staff deliver whole class and small group inputs then the children are encouraged, supported and assessed as they explore a carousel of activities and experiences. In Nursery, the children are taught during small group tasks and during short teacher inputs. The sessions are largely based on play and song at the start of the year and will become more structured and complex as the year progresses.

In both Nursery and Reception, all staff support the assessment and next steps of the children's learning by using the 'Evidence Me' app. Parents are able to

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view these learning experiences and are aware of every stage of their child's mathematical learning journey.

This policy should be read in conjunction with the following school policies:

- EYFS Calculation Policy
- KS1 Calculation Policy
- Lower KS2 Calculation Policy
- Upper KS2 Calculation Policy
- Assessment Policy
- Marking Policy
- SEND Policy
- Equality Policy

Reviewed: October 2024

To be Reviewed: October 2025