



Maths Policy

Wadsworth Fields Primary School 2022

Introduction

The following policy should be used in conjunction with the guidelines for maths presented in the National Curriculum. The school uses Power Maths, White Rose and EAZMAG and various DFE/NCTEM documents that are all linked to the National Curriculum.

EYFS follow the Statutory Early Years Framework and use Number Blocks planning and resources provided by the NCTEM to teach the majority of the framework requirements.

In order to fulfil the requirements of the national curriculum we have agreed the following aims.

Aims

1. To have high expectations of the attainment of all of our children, meeting the needs of each individual.
2. To develop mathematical skills, concepts, strategies and knowledge in order to raise achievement.
3. To develop children's enjoyment and confidence in their own mathematical skills.
4. To develop children's skills in mental calculation and give children the chance to explain their thinking, using correct mathematical vocabulary.
5. To provide a range of teaching strategies and learning opportunities, developing links across the curriculum.
6. To present meaningful tasks and promote an awareness of mathematics in the wider environment.
7. To develop continuity and progression by building on a child's previous experience.
8. To promote problem solving skills through exploration and discovery.
9. To encourage children to record in a variety of ways.
10. To promote accurate use of mathematical equipment.

Mastery in maths

All schools are encouraged to adapting their teaching practice to include the concept of mastery in mathematics.

What does mastery mean in the primary maths classroom?

Inspired by teaching approaches developed in Singapore and Shanghai, mastery is an inclusive way of teaching that is grounded in the belief that all pupils can achieve in maths. A concept is deemed mastered when learners can represent it in multiple ways, can communicate solutions using mathematical language and can independently apply the concept to new problems. TES/resources/blog

At Wadsworth, staff deliver lessons that follow a mastery approach through fluency, reasoning and problem solving activities. The lessons include the 5 ideas of mastery that are coherence, representations and structure, variation, fluency and mathematical thinking.

Planning

EYFS planning reflects the Early Years framework use a simple grid to reflect their weekly plan.

In year 1-6, staff use a simple table to plan weekly lessons. Staff follow the Power Maths scheme to organise the theme and steps for the week. Staff then use a selection of resources to create the fluency, reasoning or problem solving activities. The Power Maths and White Rose documents teach the maths curriculum in small steps, allowing for each concept to be covered thoroughly. It also links all learning to assessment for learning

and has hyperlinks to resources that are connected to the topic being taught. Also, they have access to many other resources linked to mastery in mathematics such as NRICH and NCTEM documents. Staff are encouraged to have screenshots of the worksheets/activities they are using. Maths subject leaders monitor planning and assess if the planning is consistent.

Assessment

Children's work is constantly assessed and this is communicated to the children through marking in accordance with our marking policy. Weekly plans are annotated and amended by staff where necessary. This information is then considered before planning the next weeks' maths lessons. Mental and oral starter activities are used at the start of the lesson to recap key concepts taught in the previous week and address any misconceptions. This information, together with individual assessment data, will then be used to inform teachers where units need to be revisited. Regular assessment should be ongoing each term. Assessments are available for each year group KS1 work towards SATS practise papers, LKS2 are currently trialling a PUMA assessment and UKS2 work towards practising SATS papers. Teachers then feed this information into the EAZMAG to assess and save the children's progress. Children will be assessed as either entering, developing or secure in expectations for each year group. Further, the children have the opportunity to assess their work at the end of every maths lesson.

Other long term assessments include:

- *Early Learning Goals
- *Pupil self-assessment
- *SATs at the end of Key Stage.

Record Keeping

The following records are kept on each child:

- *Special needs documentation
- *EAZMAG data

Quality of Teaching and Learning

The dedicated maths lessons will be structured and include fluency, reasoning and problem solving. A variety of teaching methods will be used according to the needs of the pupils and the objective. These are reflected in our Teaching and Learning policy. Objectives and success criteria should be shared with the children at the start of each lesson and referred to during the lesson. There should be opportunities for children to practise mental skills including counting, rapid recall of times tables and mental calculation. Recording should include both formal and informal methods, depending on each child's age and ability. There should be opportunities for children to solve problems, see patterns, make predictions and interpret data. Children should also be encouraged to explain their reasoning orally.

Following consultation with parents, any maths homework is a mixture of traditional pencil and paper activities, together with games that children can access at home on electronic devices. At home children are encouraged to practise their basic number skills, times tables and access the website for other mathematical activities. Teaching will be monitored on a regular basis by the head teacher and subject leaders for maths. Work and marking will also be monitored regularly.

Investigations to develop the use of problem solving and reasoning are built into the curriculum to develop pupil's problem solving skills. This will include all 11 areas of problem solving.

Leadership and Management

Most dedicated maths lessons, from Yr 2 to Yr 6, should be approx. an hour long. FS2 children receive a maths session every day and have activities to complete as part of both continuous provision and teacher supported tasks. They also participate in structured maths play activities during the week. Children from Yr 1 - 6 are split in various ways for maths lessons. This changes based on class sizes. Children have access to fluency, reasoning and problem solving activities in every lesson. This ensures all children are exposed to challenge and work is also scaffolded for those who need additional help. ICT is now embedded in all maths lessons, supported by the use of Power maths resources and the use of relevant websites.

The Role of the Governors

All governors are kept well informed of whole school standards by the subject leaders for maths, and they also visit lessons, when appropriate. Together with the subject leaders the link governor also monitors the maths action plan and the progress staff are making to achieve targets set each year.

The Role of the Head teacher

The head teacher has established a whole school approach and keeps governors, staff and parents well informed. She provides the necessary support and resources and monitors the quality of teaching. She also uses assessment and other data to set statutory and curriculum targets.

The Role of the Subject Leaders for Maths

The maths subject leader is responsible for writing and leading a whole school action plan, in accordance with the School Development Plan. They also provide support to teachers for planning, teaching, assessment and the use of resources. They work with the head teacher to monitor and evaluate progress in teaching and learning. They identify INSET needs for the school's training plan and keep up to date with subject development. They are also prepared to discuss with Ofsted what maths looks like in school.

Monitoring and Evaluation

The school regularly monitors teaching and learning in maths by:

- *Classroom observations involving the head teacher and maths subject leaders.
- *Work/ planning analysis and assessment.
- *Staff questionnaires / child interviews.

Partnership with Parents

Parents are kept regularly informed about their child's progress at parents evenings, support plan reviews and in twice yearly reports. At the beginning of each term parents receive an outline of what their child will be learning in maths. This information is also available on the school website. We are currently looking at how to showcase lessons to parents so they can see how maths is delivered in school.

Equal Opportunities

All work is to be presented in a non-sexist, non-racist, non-stereotypical manner. All pupils should be given the opportunity to achieve highly, regardless of their ability. We always aim to provide resources that have no cultural or gender bias.

Special Needs

At Wadsworth Fields Primary School we aim to meet the needs of every individual irrespective of their ability. Teachers will ensure that work is differentiated and scaffolded to enable all children to access the curriculum and experience success. In addition to differentiated work, children with special needs may receive additional support from a teaching assistant, intervention strategies, or support materials provided by the teacher. Children who are identified as SEN or lower ability/communicative dysfluency will receive further support through intervention strategies, including small group work and 1:1 tuition. Through reasoning and problem solving activities more able children access to more challenging activities to ensure their needs are met.

Dyslexia Statement

At Wadsworth Fields we are strongly committed to supporting all children with a Special Education Need. We are aware of the many complex and different needs of individuals (Dyslexia, Dyscalculia, Dyspraxia, ADHD and ASD) and aim to make provision for these in all lessons. Through training and resources children are supported by all adults both within and outside of the classroom.

Resources

Everyday, essential resources are situated within every classroom. Shared equipment used less frequently is located centrally. Teacher resources are now located in the stock cupboard in the KS2 corridor – including all DFES resources. All classrooms should have a maths display. In staff meetings, new resources linked to mastery in mathematics have been shared to ensure staff have access to the most up to date resources.

Times Tables

In June 2020, the government will introduce the Multiplication Tables Check (MTC). The MTC will involve a quiz for year 4 children. In preparation, all staff and year 3-6 children have access to Times Tables Rock stars (TTRS) and children in year 3-6 will have a times table quiz.

- FS – explore number bonds with tens frames and other resources
- Year 1 – focus on number bonds within 10
- Year 2- focus on number bonds within 20 and will look at introducing times tables quizzes in the summer.
- Year 3/4 have a quiz once a week practising at the start of some maths lessons.
- Year 5/6 do various quizzes linked to key number concepts

This policy will be reviewed in Sept 2024
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