

Maths Policy



Maths Policy Ranelagh Primary School

Introduction:

Mathematics equips pupils with a unique and powerful set of tools to understand and change the world. These tools include mathematical fluency, logical reasoning and problem solving skills.

Mathematics is integral to all aspects of life and with this in mind we try hard to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them as they transition to secondary school and beyond. Ranelagh Primary School follows the National Curriculum for mathematics and ensures there is continuity and progression in the teaching of mathematics.

Aims:

- provide pupils with a curriculum that produces fluent mathematicians
- provide opportunities for children to verbalise and record their reasoning in maths so that they have the confidence to and enjoy using our language of reasoning: describe, explain, convince, prove
- provide pupils with a mathematics curriculum, which will produce individuals who are creative, independent, inquisitive, resilient and confident thinkers
- provide a varied and challenging approach to mathematics learning
- use the Concrete, Pictorial, Abstract approach to teaching and learning, ensuring pupils have adequate resources and a stimulating learning environment
- provide quality teaching through the school in order to maintain standards in maths
- ensure that the NC for teaching mathematics is used
- ensure that the EYFS maintains an integrated approach in the whole curriculum
- encourage parents to be involved in maths by providing parent child workshops/ sessions
- ensure every pupil meets their full potential through monitoring and interventions
- ensure every pupil receives regular and poignant feedback in order to move their learning on
- mathematical language is part of pupils' everyday vocabulary and is present in the classroom, as is the language of reasoning

Lesson Organisation

Reception and Nursery

Pupils in EYFS will have a maths focus activity which is taught to one group a day throughout the week. In addition to this, problem solving, reasoning and numeracy will be planned for in other areas of learning. For example, in the role play corner, children will be encouraged to count money for buying and selling, or to share equipment. In construction, children will be encouraged to think about shape and space and be challenged to create models and structures with criteria.

In Reception classes, maths should be recorded in books twice a week. In Nursery, maths will be recorded in books bi-weekly. Photos should be taken daily across EYFS using 2Simple as evidence of maths learning.

Maths is planned for weekly in both EYFS and Nursery (using the EYFS Framework).

Key Stages 1 and 2

Lessons are organised according to the medium term plan. White Rose maths resources can be used to support planning, which is done weekly.

From Years 1 to 6, maths is taught for 1 hour daily. The skills acquired in the numeracy lesson are applied across the curriculum. This is evidenced in Ranelagh Curriculum books once every half term.

Teachers begin each topic by assessing their class's knowledge in that area, providing challenge from the outset and scaffolding back as needed.

Arithmetic is taught discretely once a week to develop fluency in Years 2 to 6. This could be a lesson on a specific skill or practice and consolidation of all the arithmetic skills pupils have been taught so far. The lesson is recorded in maths books and may be marked by pupils.

Pupils should be given opportunities to create journals expressing their mathematical learning and thinking at least twice a half term. These journals are evidenced in books. They do not need to be intervention marked unless there is a misconception. Pupils' learning is varied either procedurally or conceptually in order to provide challenge. This is clear in books.

The language of reasoning (describe, explain, convince, prove) is used frequently in lessons, evident in books and in pupil voice. Children are asked to check whether their answer is reasonable.

There is also an emphasis on the development of mathematical vocabulary, which can be seen around the classroom.

Teachers ensure that they model the correct use of mathematical words.

Teachers value pupils' oral contributions and create an ethos in which all children feel they can contribute. Teachers differentiate tasks in order to meet the needs of and challenge all pupils.

Teachers and teaching assistants will work with a different focus group daily or give 1:1 support where needed.

There is a balance of practical, written and mental work. The CPA approach is used in lessons to support and challenge pupils.

Setting

Children are placed in sets in Year 6 and in the summer term in Year 5, depending on the need of a particular cohort.

Assessment

It is an integral part of teaching and learning and is a continuous process.

Assessment is carried out in the following ways:

- orally through questioning
- observation of children at work
- marking of children's work

- planned assessment activities linked to the key objectives
- assessment tests at the end of each term
- At the end of each term, teachers assess children against NC objectives and grade them as emerging, expected or exceeding according the end of year standards.

Mathematics in the Ranelagh curriculum

We incorporate mathematics into a wide range of other subjects and seek to take advantage of multicultural aspects of mathematics e.g. Islamic patterns in RE.

Teachers make links to maths were possible across the curriculum and evidence this at least once a half term in the Ranelagh Curriculum books.

Monitoring

Plans and books are monitored frequently and written feedback is given every half term, to ensure progress is being made and objectives are being taught.

Special Educational Needs

Children with special educational needs, including high achieving pupils are included and planned for by the class teacher. Support is available from the inclusion manager.

All pupils take part in the daily numeracy lessons.

- Teachers plan lessons so that all pupils can be included and can make progress in the lesson.
- Teachers differentiate questions, with some targeted at specific pupils.
- Teachers also ask open questions that allow all children to take part.
- Teachers differentiate activities and outcomes as appropriate.
- Teachers use a wide range of concrete and pictorial resources.
- During whole class teaching, help is given to particular children by teaching assistants where available and as part of the pupils' learning targets.
- During activities, children are supported by teaching assistants as deemed required.

Marking

Pupils record their maths learning three times a week in books, plus one arithmetic session in Years 2-6.

All work is marked. Intervention is evident unless the recording is a journal.

Written feedback provides pupils with guidance on how to improve their work and provides pupils with a next step.

The language of reasoning is evident in marking through teachers asking their pupils to describe, explain, convince or prove.

Homework

Pupils are provided with a maths 5 a day book to last them through their time at Ranelagh. This is used for 5 minutes of arithmetic a day to be carried out as homework. Parents are provided with a workshop to learn how to use the book when it is received in reception. Teachers can set specific pages from the book or pupils can work through it at their own pace.

We recognise the importance of making links between home and school and encourage parental involvement with the learning of mathematics through parents' evenings, workshops and assemblies.

Pupils are provided with accounts to Times Table Rock Stars, J2e and Maths Prodigy which they are encouraged to access at home.

Teachers may also set their pupils weekly maths homework to consolidate their learning through a short activity.

Pupils also have times tables booklets to use at home.

Maths Champions

Pupils are provided with a 5 a day booklet in which to record their homework. Once a booklet is full, pupils can hand it to the maths leader. They will then receive a certificate and medal in the whole school assembly on Friday.

Certificates and medals are also awarded to those pupils who complete their bronze, silver and gold times table challenges. Pupils hand their booklets into the maths leader, who tests them on the completion of these challenges.

Rock Star awards (certificates and prizes) are awarded to pupils who have made excellent progress or achieved a high speed on Times Table Rock Stars. The maths leader assesses the progress of the users weekly.

Intervention

Children who are making least progress in each cohort are provided with intervention. The school data is analysed and children are selected, through discussions with the class teacher and SENCO.

Intervention groups are provided by trained TAs. Children are given a baseline assessment and progress is measured towards the end of the intervention. The programme is individualised and will seek to consolidate and extend learning of the children. Group sizes range from 2 – 6. Children are also given targets which are taught in intervention sessions. Children are taught every day for 25 minutes. Children are normally on the programme for 10 weeks.

Pre teaching is also provided to target key groups of children who are struggling with lessons. The programme seeks to engage children and give them a head start on the learning.

Pupil Maths Leaders

Peer intervention is provided to those pupils who will benefit. Year 6 mathematicians use the 5 a day book as a curriculum for supporting those pupils chosen for intervention. This takes place for twenty minutes each morning when the pupils arrive at school. Progress is tracked in a copy of a 5 a day book for each pupil.

Reporting Procedures

Annual reports to parents include comments on:

- pupil progress
- pupil effort and attitude
- pupil strengths and weaknesses.