



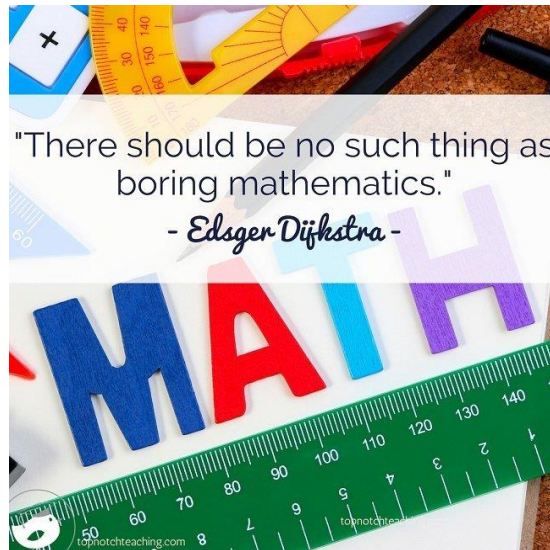
Mathematics policy

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Signature: (Headteacher)

Print name: Tracey Smith.....Date:...23/01/2023



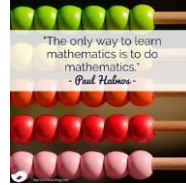
Mathematics at Rigby Hall School

We will provide a maths curriculum that reflects the varying needs and learning styles of the pupils. Children will have equal access to a wide variety of mathematical experiences in order to give them the skills, knowledge and independence to cope with everyday life and prepare them for adulthood.

Intent

- To raise levels of achievement, develop their self-confidence and raise self-esteem in Mathematics.
- To promote enjoyment of learning and foster a positive attitude to mathematics through practical activity, exploration and discussion.
- To create a stimulating environment, this will value individual efforts and bring pupils success at their own level.
- To provide practical apparatus for pupils to confidently select and use, which will help them to apply their knowledge and understanding to real life problems in a range of contexts.
- To develop confidence and competence with numbers and the number system.
- To develop and encourage cross curricular links where appropriate that will help pupils appreciate the relevance of mathematics across the curriculum, and in the outside world.





Implementation

- **Baselining & Target Setting:** All children have a Pupil Profile that takes into account all the possible obstacles/barriers/interventions that might be effecting the child's education. This profile is then reviewed on a termly basis against their progress within Maths and adjusted as necessary
- **Accessibility:** At Rigby Hall accessibility to learning regardless of learning difficulty is key to our practice. From reading support, reinforcement of basic skills, group and peer work to hands-on activities to increase engagement, we try to be as practical as possible in our teaching of maths, and where possible look to utilise our outdoor spaces.
- **Communication:** This is an essential part of maths and maths education. It is a way of sharing ideas and clarifying understanding. Ideas can become refined, discussed, and amended. The key to successful communication within the teaching of maths is to provide an environment in which students productively engage in the sharing of their thinking as they develop a greater understanding of the world of mathematics.
- **Teaching Approaches:** As a school we are aware that pupils are all individuals and that they have a variety of different ways of accessing their learning and retaining knowledge. We endeavour to use a range of approaches in our teaching which we hope will maximise all pupil's ability to learn.
- **Pupil Challenge:** we listen to and respect our pupils' voice and contributions, communicating with them through whatever means appropriate. Rigby Hall School is committed to developing the academic and life skills of all its pupils and students to enable

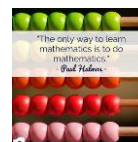


them to lead safe, happy and purposeful lives, contributing economically and socially to society.

- **Peer & Self-Assessment:** Peer and self-assessment within Maths encourages students to take greater responsibility for their learning, for example, by reflection of their own performance and that of their peers. Through this, they can learn from their previous mistakes, identify their strengths and weaknesses and learn to target their learning accordingly.

Impact

- Pupils progress is continuously monitored and levels of attainment will be assessed at intervals throughout each Key Stage using SOLAR.
- KPIs for each Key Stage and for each pathway ensure our pupils have the necessary mathematical tools to enable them to progress.
- All students have the opportunity to work towards external qualifications such as Entry Level Certificate, Functional Skills Level 1 & 2 and GCSE Foundation Maths.



CONTENT AND ORGANISATION

Rigby Hall School has a range of mixed ability pupils and classes. The table below summarises the curriculum that our children follow.

Year Group	Curriculum
Reception/KS1	EYFS
KS2	EYFS/National curriculum
KS3	National Curriculum
KS4	Accredited courses
KS5	Vocational

Generally, pupils perform below National Curriculum (NC) expectations for their age, therefore the school delivers a maths curriculum that it is **ability appropriate** rather than **age appropriate**.

EYFS/KS1

Pupils in Reception and KS1 follow the Early Years Foundation Stage (EYFS) Curriculum which incorporates 'Birth to Five matters'. Teachers endeavour to develop children's mathematical understanding through stories, songs, games and imaginative play. The mathematical focus is delivered through a specific topic with a focus on problem solving and number constantly simmering. Number is taught each morning followed by discrete maths sessions weekly and staff promotes number and the number system through everyday learning opportunities.

We strongly believe that pupils should not be rushed through the reception scheme as this forms a foundation for the remainder of their mathematical journey.

Pupils will grasp a basic understanding of number, shape, position and measure and will gradually be introduced to problem solving. Teachers use a variety of practical resources, as well as resources based on the individual child's interests, to support understanding and encourage pupils to discuss the mathematics that they are learning.

KS2 & KS3

Pupils generally start to access the Year 1 National Curriculum. Teacher assessment will determine when teachers access the Year 1 National Curriculum for the majority of pupils in their class and differentiate to include all ability levels. Pupils will be supported and stretched academically depending on their needs and abilities through detailed planning enabling teachers to meet the needs of the highest and lowest ability children in their class. Children will explore concepts of number, shape and space, measure and data handling through a variety of multi-sensory experiences. Teachers use a variety of practical resources to support understanding and encourage pupils to discuss the mathematics that they are learning. Planning will include and encourage learning outside of the classroom and will be linked into career paths for learners. Using this approach, pupils have the chance to develop a real understanding for new concepts and can explore them in a variety of ways.

KS4

At the beginning of KS4, students on the green and purple pathways will start the AQA Entry Level Mathematics qualification. This covers Entry Level 1-3 allowing students of all abilities to achieve a qualification at the end of Year 11.

These examinations test the pupil's knowledge of a broad range of early mathematical concepts. Depending on the percentage score, pupils will either achieve an Entry Level 1, Entry Level 2 or Entry Level 3 certificate.

Children on the orange pathway engage in sensory maths appropriate for their needs and development.

The Entry Level covers the assessment areas of:

- Properties of number
- The four operations
- Ratio
- Money
- Calendar and time
- Measure
- Geometry
- Statistics

For more information, [click here](#).

AQA Foundation GCSE

Where appropriate pupils in KS4 can be entered for GCSE mathematics foundation tier. Pupils will complete the AQA qualification and appropriate scheme of work. Children on the orange pathway engage in sensory maths appropriate for their needs and development.

The Foundation GCSE covers material from grades 1 to 5 in the areas of:

- Number
- Algebra
- Ratio
- Geometry
- Probability

For more information, [click here](#).

Post 16

Learning for pupils in Post 16 is focused on the practical application of maths in everyday life. Teaching is guided by functional skills objectives leading to the Edexcel functional skills qualifications (Entry level 1,2,3 and Level 1 and 2).

TEACHING AND RESOURCES

As a school we are aware that pupils are all individuals and that they have a variety of different ways of accessing their learning and retaining knowledge. We therefore endeavour to use a range of approaches in our teaching which we hope will maximise all pupil's ability to learn.

All children up to KS4 will experience a mini-maths number session every day. The structure and content of these sessions will be dependent on the ability and needs of the children. In Early Years, the focus of the mini-maths sessions will incorporate hands on, multi-sensory learning through play. Children will learn to recognise and form numbers, finding one more and one less and counting to 10. Number songs and rhymes will be taught on a regular basis. Within KS2 and KS3, the focus of these sessions will be based upon number recognition, number formation, place value, times tables and practising the 4 operations of number.

A balance between whole class, group and individual approaches in the teaching of mathematics is used throughout the school. When working with the whole class we use an interactive approach wherever possible. The pupils develop their mathematical language through opportunities to question and explain their activities and in discussion with the teacher, support staff and each other.

Numbers and number system will be promoted within classrooms with numeracy support material available within displays. Where appropriate, classrooms will have number lines displayed on the wall to support children's understanding of number and the number system. Within age

appropriate classrooms, displays will include an interactive 100 square display where key concepts can be taught

As a school, we have common high expectations and standards regarding both presentation and methodology in order to provide consistency and continuity.

Pupil's recordings are encouraged to be;

- neat and of a high standard
- presented in a clear and organised way
- presented in a variety of forms e.g. diagrammatically, graphically, pictorially, as a model or in written form.

The Role of the Mathematics Coordinator

The role of the Coordinator is to support the development of effective teaching, promote positive attitudes towards maths, inspire colleagues and lead by example in the way that they teach in their own classroom. This can include:

- Producing long and medium term plans and liaise with teachers to ensure planning is understood and followed.
- Advising on and delivering in service training to staff where appropriate
- Advising staff on how to support pupils with varying needs during mathematics lessons
- Advising staff on the assessment of mathematics
- Completing an annual review and development plan
- Coordinating resources and the departmental budget
- Identifying and acting on development needs of staff members
- Attend meetings/courses and share knowledge and information gained amongst other staff.
- Analyse data and information on pupil progress.
- Complete book reviews as appropriate and provide feedback to staff

ICT

Information and Communication Technology can enhance the teaching of mathematics significantly. It has ways of impacting on learning that are not possible with conventional methods. Teachers can use software to present information visually, dynamically and interactively, so that pupils understand concepts more quickly. A range of software and resources are available to support work with the computers.

ICT is used to aid pupils to present work in a preferred and accessible format whenever appropriate. The multi-sensory room and interactive whiteboards are widely used, along with an array of interactive teaching programmes teachers individually access online, to engage a variety of learning styles. All pupils are provided with log-in details for Education City where they can access work at school and at home that has been set individually for them to match their needs.

Resources

The school strives to invest in equipment when developing the curriculum. Topic specific resources (such as weights and scales) are located in a central cupboard. Other class based resources are located in individual classrooms.

Homework

The school recognises that difficulties arise when children are expected to complete school related tasks at home. Some pupils find any overlap between home life and time at school difficult to manage and are often viewed as detached from each other. However, some pupils are able to complete tasks at home to reinforce prior learning.

Rewards

Students can receive 'maths star' stickers for work completed or effort given within lessons. Outstanding achievement, regardless of age or ability, is shared with SLT where children can receive special stickers and, where appropriate, their successes are shared with the wider school community.

Mathematics across the curriculum

Opportunities will be used to draw mathematical experiences out of a range of activities in other subjects to provide opportunities to apply and use mathematics in real life contexts. Mathematics will also contribute to other subjects in practical ways. Teachers identify specific opportunities to deliver elements of Mathematics within their subjects. We also actively encourage staff to take their maths learning outside of the classroom. There are mathematical markings on the tarmac area, along with access to lots of outdoor space which can make maths teaching even more engaging. A resource box is available for all teachers to use during Forest School sessions encouraging teachers to take maths out of the classroom.

PLANNING

Curriculum

The long-term Maths plan will, where appropriate, encourage cross-curricular teaching alongside the Key stage's topic for the half term. Medium Term Plans are produced by the coordinator and will identify a clear pathway of learning for each topic within each half term. Using the plans, teachers will identify progressive lesson by lesson objectives that meet the needs of their learners and are available to see within the class orange folder.

KPI's and National Curriculum targets will be clearly identified and plans will not only describe what should be taught but how, with multiple examples of how to encourage high quality teaching and learning using a multi-sensory approach that will meet the needs of the children within each class. Plans will also include what the key vocabulary is, what learning outside of the classroom opportunities there are, what cross curricular links are there, and what links to careers are available, for each Key Stage, and for our MLD, SLD & complex needs children.

Short term planning is the responsibility of the class teacher following the Medium Term Plans. Short term planning should take into consideration the role of the teacher, teaching assistants, pupils and include details of groupings and differentiation.

ASSESSMENT AND REPORTING

Daily assessment

In daily maths lessons pupil's classwork is assessed frequently through a range of strategies including;

- regular marking
- analysing pupil's errors
- questioning
- discussion
- use of plenaries
- learning conversations
- verbal discussions

This information informs subsequent planning and next steps in teaching and learning. The maths teacher or Teaching Assistant records whether work is completed with support or independently, where necessary and in line with school marking policy.

Termly assessment

Each half term evidence from units completed for each pupil is reviewed and updates on pupils' progress is made onto SOLAR. In addition, reviews are completed on a pupils IEP mathematics target. The maths co-ordinator will then complete an analysis and review of the data generated.

Marking

Pupils' books should be marked on a regular basis in line with the schools marking policy.

Reporting

Each pupil has a mathematics target set termly on their IEP. It is the responsibility of the class teacher delivering mathematics to set this target, along with the success criteria and strategies. These are reviewed termly and new ones set when appropriate. In addition, a full report for each pupil is written each year. This is again the responsibility of the class teacher delivering mathematics. Each report should be written specific to the pupils' abilities and should include both their strengths and areas for improvement in the forthcoming year.

Parents also have the opportunity to attend parents' evenings on a termly basis to discuss the progress of their child in mathematics with the class teacher.

Equal Opportunities

All pupils and students will work at a level appropriate to their own needs and level of ability. All pupils will have equal access to mathematics, regardless of gender, cultural origin or ability.

Number Day

In February each year the NSPCC hold a national number day. As of 2020 we have participated in this event by having a day dedicated to maths whilst fundraising for the NSPCC. The pupils participate in a carousel of different and varied activities. For more information please follow this link - <https://www.nspcc.org.uk/what-you-can-do/charity-runs-cycles-and-challenges/social-and-special-events/number-day/>

Review

This policy was reviewed and updated in January 2023 and will be reviewed annually.