

Jarrow Cross Church of England Primary School

Mathematics Policy

Mission Statement

Jarrow Cross Church of England Primary School provides a caring Christian environment where EVERYONE is welcome and given the opportunity to develop their full potential.

Aims

Through using the Programmes of Study from the National Curriculum, and the updated mathematics framework which became statutory in 2016, we aim to develop every child's ability to become numerate citizens.

By the end of Year 6 we aim for our children to have:

- A positive attitude towards mathematics and an awareness of the fascination of mathematics;
- Competence and confidence in mathematical knowledge, concepts and skills and the ability to fluently recall facts;
- The skills to solve problems, to reason, to think logically and to work systematically and accurately;
- Initiative and an ability to work both independently and in cooperation with others;
- An ability to communicate mathematics;
- An ability to use and apply mathematics across the curriculum and in real life;
- An understanding of mathematics through a process of enquiry and experiment.

In EYFS children should be given the opportunity to:

- Develop their understanding of problem solving, reasoning and numeracy in abroad range of contexts focusing on numbers up to 10.
- Explore, enjoy, learn, practise and talk about their developing understanding
- Develop their mathematical understanding through stories, songs and imaginative plays

At Key Stage 1 (Years 1 and 2) children should learn to count, read, write and order numbers to 100. They should develop a range of mental calculations, begin to tell the time and learn about space and shape through practical activities. They should use mathematical language to explain their methods and reasoning when solving problems.

At Key Stage 2 (Years 3 to 6) children should learn to calculate fluently with all four number operations and select and use the most appropriate method to answer a calculation, whether that be a mental or written method. Children should explore features of shape and space and develop their measuring skills in a range of contexts. They should use mathematical language when discussing their methods and construct and interpret a range of diagrams and charts.

Subject Organisation

The teaching of mathematics will be linked were appropriate to other areas of the curriculum and the teaching will follow the programmes of study as set out in the National Curriculum to support children in their progression towards the Early Learning Goals and the appropriate National Curriculum levels at Key Stage 1 and 2.

The programmes of study are:

- Number and Place Value
- Addition and Subtraction
- Multiplication and Division
- Fractions, including Decimals and Percentages
- Ratio and Proportion
- Measurement
- Geometry Properties of Shape and Position and Direction
- Statistics
- Algebra

Teaching and Learning Style

At Jarrow Cross we follow a mastery curriculum where we believe every child can succeed. Our principal aim is to develop children's knowledge, skills and understanding of numeracy in a dynamic and enjoyable way whilst taking into account every child's needs. We do this through teaching the programmes of study in blocks using a Concrete, Pictorial, Abstract (CPA) approach where previously taught skills are constantly revisited and embedded. For a more detailed explanation, refer to Mastery Vision.

The Use of ICT

Opportunities to use ICT to support teaching and learning in mathematics will be planned for and used as appropriate. ICT is used to enhance the learning experience and support effective teaching. All classes have an interactive whiteboard and laptops and iPads are available with a range of numeracy resources on to support the teaching and acquisition of numeracy skills. All pupils are also provided with their personal log-in details for either Numbots or Times Table Rockstars accounts (age dependent) so they can access it outside of school.

Assessment and Target Setting

Assessment for learning takes place in the following ways:

- Ongoing observations during the lesson
- · Marking of work
- Through immediate feedback

Pupil Progress meetings are carried out every half term and used to inform target groups and settings to ensure groups are fluid.

Monitoring

Monitoring of the standards of the children's work and of the quality of teaching in maths is the responsibility of the Maths Coordinator and the SMT. The work of the co-ordinator involves supporting colleagues in the teaching of maths, being informed and keeping staff up-to-date about current developments and providing a strategic lead and direction for the subject in the school.

The SMT carry out a work scrutiny of books every half term. During these monitoring sessions the SMT are looking for well-planned activities which build sequentially throughout a week, provide opportunities for pupils to develop fluency, reasoning and problem solving and offer sufficient challenge for all pupils. When work is marked, feedback must be effective and marked in accordance to our Marking and Feedback Policy which includes, where possible, live on-the-spot marking to enable misconceptions to be quickly addressed and children identified for further support.

Inclusion

We follow a mastery ethos whereby work is adapted to meet the needs of individuals whilst not capping their achievements. We use our Tracking System to identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment. Children working at greater depth are identified and suitable learning challenges provided.

Equal Opportunities

All children are provided with equal access to the mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.