

Childwall Abbey School



Numeracy Policy

Mission Statement

A calm, safe and welcoming place in which to work and learn.

A place where everyone supports each other to achieve.

A place we enjoy coming to each day.

1. Aims and Objectives

Numeracy teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of numeracy.

The aims of numeracy are:

-  To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion
-  To promote confidence and competence with numbers and the number system
-  To develop the ability to solve problems through decision making and reasoning in a range of contexts
-  To develop a practical understanding of the ways in which information is gathered and presented
-  To explore features of shape and space and develop measuring skills in a range of contexts
-  To understand the importance of numeracy in everyday life

2. Teaching and Learning style

We use a range of multi-sensory teaching and learning styles. We use a number of common fundamental principles that make for successful teaching for pupils on the autism spectrum.

These include:

- Intensive, structured and purposeful teaching.

- Clear, unambiguous and explicit instructions and teaching strategies.
- Use of repetition to consolidate.
- Re-teaching in different contexts and in different ways, not assuming that the pupil has understood because they have repeated or demonstrated something.
- Using a communicative form that the pupil understands and can use to convey ideas to others i.e.: visual, audio or kinetic learning by giving students the opportunity for learning to be achieved through experience of the world.
- Giving opportunities for learning with a personal meaning that is interesting and motivating.
- A high level of adult support and tuition.

In all classes there are children of differing mathematical ability. We recognise the fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies - in some lessons through differentiated group work, and in other lessons by organising the children to work in pairs on open ended problems or games. We use classroom assistants to support some children and to ensure that work is matched to the needs of individuals.

3. Numeracy Curriculum Planning

Numeracy is a core subject in the National Curriculum and we use the National Numeracy Strategy as the basis for implementing the statutory requirements of the programme of study for numeracy.

We carry out the curriculum planning in numeracy in three phases (long term, medium term and short term). The National Numeracy Strategy Framework for Teaching gives a detailed outline of what we teach in the long term while our yearly teaching programme identifies the key objectives in numeracy that we teach in each year.

Our medium term numeracy plans, which are adopted from the Framework and give details of the main teaching objectives for each term, define what we teach. They ensure an appropriate balance and distribution of work across each term. These plans are kept and reviewed by the subject leader.

It is the class teacher who completed the weekly plans for the teaching of numeracy. These weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. The class teacher keeps these individual plans, and the class teacher and subject leader often discuss them on an informal basis.

4. Contribution of numeracy to teaching in other curriculum areas **English**

Numeracy contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems in order to identify the numeracy involved. The children explain and present their work to others during plenary sessions. Younger children enjoy stories and rhyme that rely on counting and sequencing. Older children encounter mathematical vocabulary, graphs and charts when using non-fiction texts.

Information and Communication Technology (ICT)

Children use and apply numeracy in a variety of ways when solving problems using ICT. Younger children use ICT to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating repeating patterns such as tessellations. When working on control, children use standard and non-standard measures for distance and angle. They use simulations to identify patterns and relationships.

Personal, Social and Health Education (PSHE) and Citizenship

Numeracy contributes to the teaching of personal, social and health education and citizenship. The work that children do outside their normal lessons encourages independent study and helps them to become increasingly responsible for their own learning. The planned activities that children do within the classroom encourage them to work together and respect each other's views. We present older children with real life situations in their work on the spending of money.

Spiritual, Moral, Social and Cultural Development

The teaching of numeracy supports the social development of our children through the way we expect them to work with each other in lessons. We group children so that they work together, and we give them the chance to discuss their ideas and results. The study of famous mathematicians around the world contributes to the cultural development of our children.

5. Assessment and Recording

Teachers use Classroom Monitor to enter assessment scores, targets and evidence of learning into the curriculum-mapped online markbooks. This builds an accurate picture of each pupil's learning needs.

We assess children's work in numeracy from three aspects (long term, short term and medium term). We make short term assessments which we use to help us adjust our daily plans. These short term assessments are closely matched to the teaching objectives.

We make medium term assessments to measure progress against the key objectives, and to help us plan the next unit of work. We use the class record of the key objectives as the recording format for this.

We make long term assessments towards the end of the school year and we use these to assess progress against school and National targets. We can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year so that s/he can plan for the new school year. We make the long term assessments with the help of end of year tests and teacher assessments. We use the national tests for children in Year 2 and Year 6 plus the optional national tests for children at the end of Years 3, 4 and 5. We also make annual assessments of children's progress measured against the level descriptions of the National Curriculum.

The numeracy subject leader keeps samples of children's work in a portfolio. This demonstrates what the expected level of achievement is on numeracy in each year of the school. Teachers meet regularly to review individual examples of work against the national exemplification material produced by the QCA and the DfE.

6. Resources

There is a range of resources to support the teaching of numeracy across the school. All classrooms have a number line and a wide range of appropriate small apparatus. Mathematical dictionaries are available in all classrooms. Calculators and a range of audio visual aids are available from the central storage area. The library contains a range of books to support children's individual research. A range of software is available to support work with the computers.

7. Monitoring and Review

Monitoring of the standards of children's work and of all the quality of teaching in numeracy is the responsibility of the numeracy subject leader. The work of the numeracy subject leader also involves supporting colleagues in the teaching of numeracy, being informed about current developments in the subject and providing a strategic lead and direction for the subject in the school. The

numeracy subject leader gives the Headteacher an annual summary in which s/he evaluates strengths and weaknesses in the subject and indicates areas for further improvement. The Headteacher allocates regular management time to the numeracy subject leader so that s/he can review samples of children's work and undertake lesson observations of numeracy teaching across the school. A named member of the school's Governing Body is briefed to oversee the teaching of numeracy.

Supporting pupils on the autism spectrum.

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These include:

- Intensive, structured and purposeful teaching.
- Clear, unambiguous and explicit instructions and teaching strategies.
- Use of repetition to consolidate.
- Re-teaching in different contexts and in different ways, not assuming that the pupil has understood because they have repeated or demonstrated something.
- Using a communicative form that the pupil understands and can use to convey ideas to others i.e.: visual, audio or kinaesthetic learning, giving students the opportunity for learning to be achieved through experience of the world.
- Giving opportunities for learning with a personal meaning that is interesting and motivating.
- A high level of adult support and tuition.

e-safety awareness statement

1. e-safety awareness is a whole school priority and the responsibility of all stakeholders at Childwall Abbey School.
2. e-safety awareness is part of all staff's normal teaching routine.
3. e-safety awareness is incorporated into lessons and Schemes of Work.