

Reasoning and problem solving

We encourage children to reason and solve problems by following a line of enquiry, finding relationships between numbers, developing an argument, justification or proof using mathematical language.

There is a strong focus on children explaining their thinking and being able to state what a problem is asking whilst also being able to state what is incorrect about a statement. At the heart of all of our lessons we encourage children to keep thinking beyond the answer.

They are regularly asked to explain their thinking and convince others why their answer is correct.

Training and Monitoring

We believe that receiving high quality mathematics training helps us to become better teachers and inspire our pupils. This year we have received hands on training for all staff in the 'CanDo maths club' approach. There are also subject expertise videos in all areas of the mathematics curriculum which staff can access to support their own subject knowledge.

Rigorous monitoring of attainment and progress through book looks, observations, data analysis, pupil interviews, discussion with staff and evaluation of learning environments enables teachers to constantly reflect and improve on their own practice. We also have regular monitoring feedback from DOWMAT to ensure effective practice is maintained.

What Maths looks like at Pinvin First CE School?

Planning and Assessment

We follow a Mathematics curriculum that builds on children's skills and understanding. The structure of each lesson is the same with practising an example with the teacher 'do it' before they attempt a similar example independently. The children's thinking is then developed or secured by being encouraged to explain why a similar example is incorrect. Finally learners are challenged further to apply or 'deepen' their knowledge to a new problem solving situation.

Assessment is continuous with regular opportunities for teachers to address misconceptions and challenge thinking further. Daily 'maths meetings' enable teachers and children to revisit key concepts and consolidate their learning.

Recall of facts and fluency

Children are taught the key number and multiplication facts in line with year group expectations. There are specific daily sessions planned to enable these crucial skills to be regularly practised and applied.

Oracy and vocabulary

Vocabulary is progressive throughout the year groups. Discussion is promoted in every lesson to equip children with the ability to articulate their reasoning at a deeper level.

SEN:

Children with a range of SEN needs are supported across the school. Their needs are supported through interventions, additional materials, acceleration programmes and extra support from teachers and TA's.

Maths in the Real World

Opportunities are planned for pupils to apply their mathematical knowledge in science and other subjects. Children are encouraged to develop an understanding of how maths can be used in a range of jobs and in the wider world.

Learning Environments and resources

We create learning environments which are rich in concrete apparatus and pictorial representations to help children develop their understanding of mathematics. We display current learning on working walls so children are aware of their 'learning journey' and the skills that they will require. We encourage children to be independent wherever possible and try to enable them to select their own strategy and resources to support their work. These practical steps are crucial before children are able to progress to solve abstract problems.