

Maths
at
Percy Main Primary School

Curriculum Intent

Our aim is to equip all pupils with the skills and confidence to solve a range of problems through fluency with numbers and mathematical reasoning. Alongside these key skills, we also strive to instil in our children a love of maths; the ability to see the possibilities and creativity in the maths around us, to be intrigued and to wonder about maths.

At Percy Main Primary School we are at the beginning of our mastery journey to improve the teaching and learning of mathematics. Using this approach, which involves small steps with varied representations and structures, we are confident that we can build solid foundations from which our pupils can grow as mathematicians.

The three aims of the NC - Fluency, Reasoning and Problem Solving - should be addressed every day.

Our intentions:

- Our aim is to ensure that every child becomes a confident and fluent mathematician
- To promote and instil problem solving skills
- To ensure pupils can use and apply their mathematical knowledge in a range of contexts

Curriculum implementation:

Our Maths curriculum is centred around the White Rose Maths Hub approach to maths. Pre and post unit assessments are carried out to acknowledge starting points and progress.

In addition, every Friday is 'Big Maths' children complete 'Beat that' tests to prove their fluency. These regular Friday activities enable mathematical concepts to be addressed weekly and allow constant revisiting of different areas of the mathematics curriculum (keep the pot boiling)

Each Friday children complete:

- CLIC challenges: Covers all the basic skills that children need to be properly numerate
- The Learn it Challenges: Covers all the number facts children need
- The SAFE challenges: Covers the rest of the maths curriculum

End of term assessments are used to assess the pupils against their summative target and ARE.

All teachers attend moderation with the local authority around their teacher judgements.

Otrack Is used for data collections on a summative basis

Whole class - we teach mathematics to whole classes. Lessons are planned based on formative assessment of what pupils already know and we include all children in learning mathematical concepts. At the planning stage, teachers consider what scaffolding may be required for children who may struggle to grasp concepts in the lesson, and suitable challenge questions for those who may grasp the concepts rapidly

Longer and deeper - in order to address the aims of the NC, our long/medium term plans have been adjusted to allow longer on topics. Each lesson focus is on one key conceptual idea and connections are made across mathematical topics. To outsiders it may appear that the pace of the lesson is slower, but progress and understanding is deepened. Questions probe pupil understanding throughout and responses are expected using precise mathematical vocabulary.

Difficult areas and possible misconceptions are identified during the planning process and children will be supported through these.

Fluency - There is a whole school focus on developing an instant recall of key facts, such as number bonds, times tables. However, we recognise that fluency is not just about remembering facts so we develop all aspects of fluency in lessons - accuracy, flexibility and efficiency.

Carefully chosen representations (manipulatives and images) are used by all year groups and abilities to explore concepts. These representations will appear in books or on seesaw as children show their understanding.

Teachers use a small steps approach to allow the concepts to be understood by all children.

Teachers use questioning throughout every lesson to check understanding and dig deeper. Children are asked to explain their thinking and errors are valued as an opportunity to clarify misconceptions.

Discussion and feedback - pupils have opportunities to talk to their partners and explain/clarify their thinking throughout the lesson.
Greater depth - Children who grasp concepts quickly are given the opportunity to "go deeper" rather than move into the next year group objectives. Challenge can take a number of forms, e.g. giving or writing a clear explanation of a problem or concept; children devising their own related problem; reversing a problem; finding an alternative solution/method or teaching a friend.

SEN pupils - may be supported by additional adults, different resources, differentiated activities.

Same day intervention/masterclass is a key focus area for the development of Mathematical understanding. Teachers identify children to participate in these masterclasses daily to support with their ability to 'keep up' in the main body of the lesson.

Curriculum Impact:

At Percy Main Primary School, we aim to share our vision of high aspirations for all of our pupils through our high expectations across the wider curriculum; by setting these high expectations, our pupils are aware of the standards we expect in all lessons and learning opportunities.

We strive to ensure that our children's attainment is in line or exceeds their potential when we consider the varied starting points of all our children. We measure this using a range of materials, whilst always considering the age-related expectations for each year group. Children will make at least good progress in mathematics from their last point of statutory assessment or from their starting point in our 2year old provision. We intend the impact of our Maths curriculum will ensure our pupils are academically prepared for life beyond primary school and throughout their educational journey.