



PJS Maths Curriculum

Intent:

Mathematics equips pupils with a uniquely powerful set of tools by which to understand and change the world. It is integral to everyday life and as such we endeavour to ensure that our pupils develop a positive and enthusiastic attitude towards mathematics, in turn fostering achievement, which will remain with them as they move to secondary school and beyond.

At Perryfields Junior School, in conjunction with the aims of the National Curriculum, our Mathematics curriculum enables children to:

- move through a clearly structured and sequenced curriculum where knowledge and skills are progressive and built upon each year.
- develop an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- deepen their understanding further through an ambitious and engaging curriculum
- successfully achieve in all lessons through effective adaptation, support and challenge
- explore mathematics through real world contexts which enhances cultural capital for all learners
- become enthusiastic mathematicians with a thirst for knowledge and enquiry

Implementation:

Maths at Perryfields:

- Alongside the national curriculum objectives, the school uses the exemplification of these objectives provided by the NCETM Teaching for Mastery documents and the White Rose Hub guidance.
- The use of White Rose medium term planning is adapted to create a bespoke curriculum designed to meet the needs of our children and to allow for opportunities for revisit and retention, ensuring full coverage of the national curriculum for mathematics and providing a broad and balanced spread of all areas of the curriculum. Teachers are confident to manipulate this planning in the short term in order to meet the needs of all of our children using our six-point lesson structure. This, along with our Calculation Policy, ensure that the teaching of mathematics year to year builds progressively on the skills taught in previous year groups.
- We are committed to ensuring that all children achieve mastery in mathematics and our teaching for mastery is underpinned by the NCETM's 5 Big Ideas. Therefore, our daily maths lessons include fluency, reasoning and problem solving.
- Mathematics 'working walls' are in each classroom to provide key information and vocabulary with modelled examples to support learning.

- pupils are taught through whole class lessons grouped by pace or targeted differentiated small groups (if needed).
- Starter activities ('Do Nows') are used at the beginning of each lesson to revisit previous learning and ensure skills are embedded.
- Concrete manipulatives and pictorial representations are used to support conceptual understanding and to make links across topics.
- Quality first teaching is provided throughout the school along with effective teacher modelling along with effective assessment for learning to make sure children are moved on in their learning or supported when finding it difficult
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up.
- A range of reasoning resources are used to challenge all pupils and give them the opportunity to reason with their understanding.
- Immediate intervention during lessons are used to support pupils to ensure they are ready for their next Maths lesson.
- Opportunities for self-assessment are provided daily so children are given instant feedback in their learning. Growth mindset self-assessment trays are used at the end of each lesson which give a clear indication of how confident children are feeling about the current concept taught. Books in the 'What am I missing?' tray can then be addressed if there is a need.
- Marking and feedback is by adults throughout the lesson during talk tasks and independent activities as well as children's books being deep marked once a week with a personalised challenge or support task.
- Basic Maths skills are revised weekly, focussing on key mathematical skills including times tables, place value, the four operations and fractions.
- Maths interventions focussing on key concepts, such as place value and the four operations, take place in the afternoons for pupils who need it the most.
- Homework is set to develop and review pupils' learning.
- Times Table Rock Stars is used to enthuse the children when learning times tables.
- Children are assessed on a termly basis.
- Where possible, links are made with other subjects across the curriculum.
- Enrichment days offer additional mathematical knowledge and understanding and make a link between maths and the real world.

Impact

As a result of our Maths teaching at Perryfields Junior School you will see:

- engaged pupils who love the challenge of learning, are resilient to failure and thrive in lessons.
- confident pupils who can all talk about maths and their learning and the links between mathematical topics.
- pupils with a growth mindset about their ability to learn mathematics.
- Pupils who use and apply mathematics across the curriculum and in real life.

- pupils with an excellent standard of fluency (rapid recall and application of facts and concepts).
- pupils with a growing confidence to reason mathematically and the ability to apply maths to solve problems, to conjecture and to test hypotheses.
- pupils who can work both independently and with others.
- learning that is tracked and monitored to ensure all children make good progress.
- most children achieving age related expectations in maths at the end of their cohort year.