Mathematics curriculum at PACE

<u>INTENT</u>

LAUNCHPAD

Mathematics 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 a child to understand and appreciate relationships and patterns 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 mathematics.

In mathematics, we use Hamilton Trust teaching resources as a basis for teaching from Year 1 through to Year 6. The school's long term, medium and short term planning is based on this scheme. Mathematics teaching across all year groups is therefore broken down into the different areas of the National Curriculum: number, measurement, geometry, statistics, ratio/ proportion/algebra (year 6)

Hamilton' advisor Ruth Mertens gives us a clear consistent curriculum strategy throughout the School. Through the calculation strategy teachers can ensure that the children hear consistent language and use progressive methods that build from one year to the next, without requiring them to confront new pedagogy at every year group. This also supports the children independently on other supportive interventions we use such as Education City and ed Shed which are directly linked to the Hamilton Trust curriculum taught in class.

Previous year group concepts are revisited so that children can continue to progress through new taught concepts within their current year group.

The Aims of Mathematics in our School are:-

- Re engage the children with their learning journey and help them to believe they can achieve in mathematics and avoid 'maths anxiety'
- Develop children's ability to problem solve and reason in a variety of different concepts concrete, pictorial and abstract.
- Develop fluency so that they can select the most appropriate method to solve a problem.
- To support them to become resilient leaners who enjoy maths and persevere.
- To provide them with regular learning opportunities to revisit previous learning.
- To enable children to become fluent mathematicians who can reason and problem solve through
- Encourage the development and use of mathematical language from an early age.

Good Provider

• Fluency and memory recall is built into daily maths lessons to ensure learning and skills are transferred to long term memory





IMPLEMENTATION

Teachers follow the schemes of learning from Hamilton Trust which ensures progression can be seen across the school.

TIC and maths lead ensure any CPD needs are met. Our mathematics lead accesses training from the Teaching schools Alliance and The National College to keep up to date with new initiatives / thinking and research. This is communicated to staff through curriculum meetings.

Teachers plan lessons that ensure progression happens and that fluency, problem solving and reasoning occurs equally for all pupils. Teachers encourage the use of talk partners and thinking time to allow all children to contribute their thinking and develop their technical language skills.

Teachers make notes on short term planning to identify children who may need extra support in achieving their potential.

Themed days allow opportunities for cross-curricular maths. Maths working walls are continually changed to support and aid the learning in class. Half-termly monitoring feedback is reported to teaching staff, SLT and governors Responsibility for curriculum coverage is given over the professionalism of the teaching staff

IMPACT

The vast majority of pupils, from their starting point to when children leave PACE, make good progress in mathematics. A percentage of these children make accelerated and above expected levels of progress.

Children enjoy mathematics - see data from pupil voice questionnaires.

Children are able to communicate their ideas mathematically and have the resilience to complete

a range of tasks.

LAUNCHPAD

All 3 aims of the national curriculum are evident in learning across the school:

- 1. Develop a positive attitude toward mathematics and to appreciate its practical applications in life.
- 2. Develop problem solving skills and the ability to use mathematics in everyday life.
- 3. Use mathematical language effectively and accurately.









