

# Maths

## Curriculum Statement

### Intent – What are we trying to achieve?

At Cummersdale School we recognise the importance of mathematics throughout each child's everyday and future life. It enables children to understand relationships and patterns in both number and space in the world around them. It is essential to everyday life, critical to science, technology and engineering and necessary for financial literacy and most forms of employment. We intend to give each child the self-confidence and resilience to reach their full potential by ensuring that they have the tools to calculate fluently, reason logically, problem solve and think in abstract ways. Children become confident, competent and independent mathematicians

Build a deep conceptual understanding of maths and its interrelated content so that children can apply their learning in different situations

Develop children's ability to articulate, discuss and explain their thinking using appropriate mathematical vocabulary

'Mistake friendly' classrooms where children see mistakes as learning tools – there is an emphasis placed upon developing the power to 'think' rather than just the 'do'

Instil the mind-set in every child and staff member that everyone can do maths and that maths is for everyone...EVERYONE CAN!

Children develop into resilient and inquisitive learners – skills needed to become life-long mathematicians

Deliver an inspiring and engaging mathematics curriculum, taught by highly-enthusiastic staff, which sparks curiosity and excitement and which nurtures confidence in maths

### Implementation – How is our vision translated into practice?

In order to improve our mastery approach and further improve the quality and consistency of our maths teaching, we have implemented Power Maths – a government recommended, high-quality mastery textbook.

We recognise the value of making a coherent journey through the national curriculum and each year group follow a medium term plan where small, cumulative steps build a solid foundation of deep mathematical understanding. Formative assessment is threaded throughout both each lesson and unit of work; and appropriate revisions to planning are made by the class teacher to ensure all lessons are tailored to best meet the needs of their children.

It is essential that children have a deep understanding of the most important elements that underpin the mathematics curriculum so that there is consistency and continuity as children move from one year group to the next. Therefore, if necessary, time may be weighted towards those objectives set out in the ready-to-progress criteria (non-statutory guidance provided by the Department for Education, created in partnership with the National Centre for Excellence in the Teaching of Mathematics).

In order to meet our aims above and the requirements set out in the EYFS framework and the Primary National Curriculum, we will implement the following:

- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics – EVERYONE CAN! Maths is for EVERYONE!
- Teachers promote positive learning characteristics through the Power Maths characters – Determined (Dexter), Brave (Astrid), Curious (Ash) and Flexible (Flo).
- To develop secure and deep conceptual understanding, staff plan for the use of concrete resources, varied representations and structures (outlined and guided through Power Maths)
- The vast majority of children progress through the curriculum content at the same pace

Regular and ongoing formative assessment informs teaching, as well as intervention, to support and enable the success of each child

Summative assessments take place at the end of a unit and termly (NFER tests) and planning is adjusted accordingly

Children's attainment and progress is discussed by teachers and if progress is not made, support is immediate and steps provided

Children's attainment and progress is discussed with parents/carers during parents evenings

Differentiation is achieved by emphasising deep knowledge and through individual support and intervention. It is seen through the concrete resources used, and/or the reliance on the representations and structures within a lesson to help embed a mathematical concept. All children are expected to be exposed to age related expectations and staff allow the time to plug gaps children may have in a particular area of mathematics. Staff understand what age-related expectations and mastering looks like for each objective and plan for how their children will get there. In order to meet the needs of all pupils, children working at a greater depth of understanding within an area of mathematics have 'going deeper' opportunities planned by staff.

Success criteria are set out in each session in order to guide children to achieve success.

Provision will be made for children who are not making the expected level of progress through I.E.Ps and interventions.

Teaching that is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge

Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.

Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up.

Children's explanations and their proficiency in articulating mathematical reasoning, with the precise use of mathematical vocabulary, are supported with teachers placing a strong emphasis on the correct use of mathematical language.

Teachers and TA s active mark through the lesson as much as possible to provide immediate feedback and intervention where needed.

Maths lead takes part in regular maths pupil voice meetings and full reports on maths audits are presented to governors.

Book looks are carried out termly by the maths lead and support put in place for any staff who need it in the form of coaching.

The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with headteacher and SENCO, key data is analysed and regular feedback is provided, to inform on progress and future actions (such as intervention groups).

We are currently taking part in the North West Maths Hub, NCETM "Mastery Readiness Programme" to further develop the "Mastery Approach" of teaching Mathematics, ensuring staff are confident and feel empowered to deliver the maths curriculum and have the resources and support they need to achieve this. After completing the programme we will be prioritised for a place on the high-profile "Teaching for Mastery Programme" within our Maths Hub.

Teacher and TAs have completed three online White Rose Maths CPD courses (Bar Modelling, CPA and Thinking Through Variation) which will allow us to deliver lessons so children can work towards maths mastery.

To supplement their learning, children have access to various online platforms including TTRockstars, Numbots and Mathletics.

We offer a wealth of enrichment activities to promote maths within our children's lives including extra-curricular maths clubs and dedicated maths weeks in school. Children attend a Maths Day organised by The Caldew Maths Consortium annually.

## **Impact**

- learners develop detailed knowledge and skills across the curriculum and, as a result, achieve well. Where relevant, this is reflected in results from national tests and examinations that meet government expectations, or in the qualifications obtained
- learners are ready for the next stage of education, employment or training. Where relevant, they gain qualifications that allow them to go on to destinations that meet their interests, aspirations and the intention of their course of study. They read widely and often, with fluency and comprehension.

Pupils develop a secure understanding and confidence in maths with resilience and problem solving skills to aid learning in all subject areas. They develop a growth mindset and love of mathematics to want to study further at secondary school. Develop:

- Learners who can clearly explain their reasoning and justify their thought processes using mathematical language and apply it to new problems in unfamiliar situations

- Quick recall of facts and procedures
- Flexibility and fluidity to move between different contexts and representations of mathematics
- Ability to recognise relationships and make connections in mathematics
- Happy confident, articulate and autonomous learners with a life-long passion for learning.