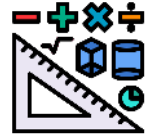


# Subject on a Page

# Mathematics



At St. Cuthbert's we want our pupils to enjoy and become proficient at maths, gaining a deep and meaningful understanding of the subject

## Intent: What do we want for all our pupils?

We want our pupils to develop a curiosity and confidence with maths from the moment they join us in EYFS and for them to be resilient and think deeply about their learning. Our children will:



become interested in and enthusiastic about maths



become fluent in recalling key number facts



build on their learning in small steps and be challenged in lessons



have a deep understanding & explain mathematical thinking



benefit from a carefully sequenced curriculum with strong links to KS3



be able to link maths to other subjects and the world around them

## Implementation: How we sequence & teach our maths curriculum

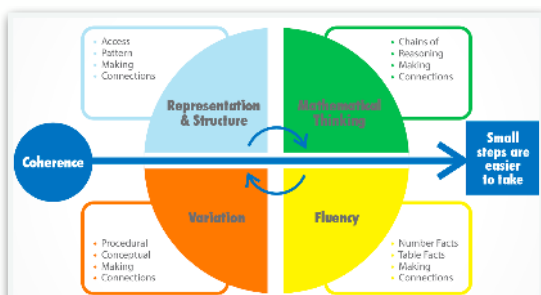
### Curriculum Design

Our mathematics curriculum has been developed to ensure every child can reach their potential in maths and that an enthusiasm for and confidence in maths is engineered in each child. We have adopted a maths mastery approach which means pupils acquire a long term, secure and adaptable understanding of the subject.

The curriculum is carefully sequenced so children learn in small steps, recall key knowledge & build upon prior learning. We ensure all our children are given opportunities to reason & problem solve, applying their mathematical understanding to the world around them. Using White Rose Maths & NCETM, teachers map out an annual plan of key areas of learning. These are then carefully broken down into small steps with opportunities planned for fluency, calculation, reasoning & problem solving.

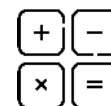
### Teaching & Learning

We work with local maths hubs to use current pedagogy to develop and improve our curriculum and teaching. We have adopted the NCETM five big ideas to develop our curriculum and lesson structure:



### Teaching & Learning

We recognise that being able to recall key number facts and proficiently use algorithms are essential characteristics of successful mathematicians. Learning facts reduces cognitive load which enables pupils to focus on the application of facts, not trying to work out the facts themselves. To develop fluency and rapid recall of number facts we do the following:



**Number Sense** sessions: planned half termly and delivered 3 times a week from Y1 to Y6. These sessions provide an opportunity to learn mental facts and strategies.

**Calculations** sessions: completed weekly and give pupils the opportunity to become fluent and practise mental and written strategies

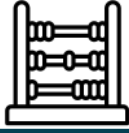
**Times tables:** We use TT Rockstars and a range of other strategies to ensure children are proficient in rapid recall.

From EYFS to Y6, a teaching for mastery approach is used. From Year 1 to Year 6, maths lessons follow a similar approach and last for 50 minutes. In EYFS, teaching principles are similar but will not always be in a formal maths lesson as much of what pupils experience and learn is embedded in continuous provision and delivered in small group tasks.

## Lesson Design



Recall of previously taught knowledge from previous lesson or units of work



New learning introduced in small steps using CPA approach to draw out key conceptual knowledge



Accurate and concise mathematical vocabulary is used including stem sentences which allow concepts and procedures to be verbalised clearly



Children undertake a series of intelligent practice opportunities with regular feedback



A 'ping pong' approach is adopted to ensure all children move on to reasoning in lessons



Teachers assess progress and move pupils on (see below)

Lessons last for 50 minutes as sequenced above. At the end of each lesson, teachers make formative judgements based on children's responses (verbal & written) in the lesson. Children who have not met the expectations or where learning is not secure will receive some same day intervention to ensure they are at the same starting point as their peers in the next lesson. Children who have a secure understanding, use this time as an opportunity to deepen their learning through a 'Now Try This' challenge

## Inclusion

Maths is critical in securing lifelong success for our pupils & we are committed to making sure all our pupils make best possible progress. At times, some pupils may have difficulties with maths & not progress at the same pace as their peers. Teachers work closely with our SENCO & may put interventions & alternative programmes in place for pupils with an identified Special Educational Need relating to maths. This may include a personalised curriculum, additional support or precision interventions. Where applicable, staff will work alongside advisers to develop a plan to ensure all pupils have the best chance of succeeding.

## Impact: How do we assess our maths curriculum?

Formative assessment at the end of each lesson

Number sense and times tables are assessed and recorded weekly

End of unit assessments for each block of work taught are recorded in whole school template

NTS maths assessments from Y1- Y5 termly  
Standardised Y6 assessment termly & gap analysis is carried out

EYFS pupils are assessed and tracked according to Early Learning Goals termly

National Standardised Assessments in Y2, Y4, Y6

The maths coordinator monitors teaching and learning in mathematics through the Bishop Chadwick CET 5 strand and 4 strand approach termly.