Christ Church School, Hampstead
A village school in London inspiring ***life in all its fullness***

Mathematics Curriculum Statement June 2020

This statement, and our Mathematics intent and curriculum, has been developed by our subject leader for Mathematics in discussion with our teaching staff team and our Teaching, Learning and Standards Governors Committee.
This curriculum statement should be read alongside

- our school vision statement
- our Teaching, Learning and Assessment Policy and our Policy on Marking and Feedback to Children
- our published curriculum overview
- our 'curriculum pack' for Mathematics, which includes details of the agreed curriculum for Mathematics at Christ Church, including our skills and content progression documents

Intent of our Christ Church Mathematics Curriculum

At Christ Church we recognise that mathematics is an important life skill as well as fundamental to the vast majority of career pathways. Therefore it is our intent that we provide a high-quality mathematical education which will ensure children move to the next stage of their education being numerate, confident and well-equipped. Through quality first teaching, with our primary aim being mastery of the curriculum for all children, we aim to unlock children's potential in maths and make it a fun, engaging subject which is accessible to all. Our intention is to show children they can master the maths curriculum and that maths is an area where all children can experience success and is not something to be anxious about. With this in mind, we recognise the importance of being fluent in the fundamentals of maths and provide a variety of opportunities for children to practise their automatic recall to make it more rapid and accurate.

All children are encouraged and given the opportunity to reason mathematically and solve problems.

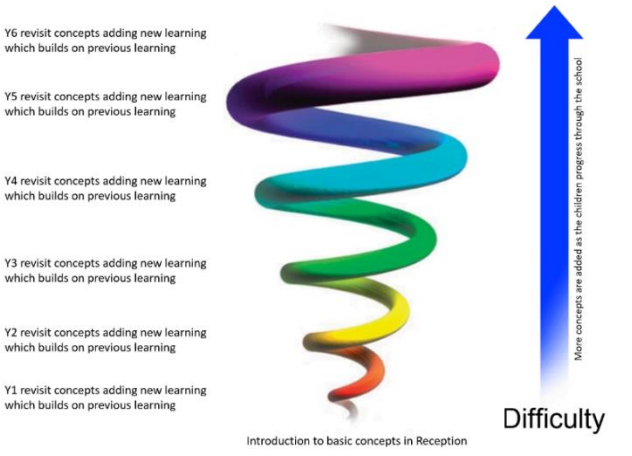
With maths being an interconnected subject, children not only need to make connections and links between mathematical concepts but they need to be provided with concrete experiences of using maths outside the maths lesson. Wherever possible, we aim to use maths in our other subject areas so that children have the opportunity to experience interwoven learning and also to understand the importance of everyday maths in other areas.

Children who are working at greater depth in each year group receive input which challenges their reasoning and problem solving skills using the content which has been taught. Only once a rich offer has been provided where children can demonstrate they can make connections and use and apply their skills broadly would we consider moving on to what might potentially be new content.

A Spiral Curriculum

The manner in which the National Curriculum Programmes of Study are set out leads to spiralled learning between each year group. The children revisit the same mathematical concepts but each time they are introduced to new and more challenging learning which builds upon what has gone before. This not only happens between each year group but also within a year group where teachers design a year group curriculum which spirals back to the main, key areas/strands.

Spiralling Curriculum from Year Group to Year Group



Teaching for Mastery

At Christ Church we do not use any mastery scheme, instead, our view of mastery is aligned with that of Derek Haylock (2019) and the National Centre for Excellence in the Teaching of Mathematics (NCETM):
Mastering maths means pupils acquiring a deep, long-term, secure and adaptable understanding of the subject.
The phrase 'teaching for mastery' describes the elements of classroom practice and school organisation that combine to give pupils the best chances of mastering maths.

Achieving mastery means acquiring a solid enough understanding of the maths that's been taught to enable pupils to move on to more advanced material. (NCETM, 2019)

Through quality first teaching we aim for all children to acquire mastery in maths. Teachers use the progression document for each strand in maths to ensure learning is built cumulatively. It is important that we check children's understanding of the methods they use and calculations they can do. This is because many of the children are capable, for numerous reasons, of using the most efficient methods quickly and with ease, but there may be underlying gaps.

Key points relating to our intent

Although as a general rule we endeavour to follow the National Curriculum in terms of how it has divided the programme of study for each key stage, we may also choose to teach content from the programmes of study recommended for other year groups that has not yet been covered. This is done for many reasons and it is specific to our context to ensure the needs of each cohort are met. The National Curriculum helpfully highlights that the set programmes of study are to be met by the end of the relevant key stage. However, when a teacher chooses to do this, they will have a professional conversation with the maths leader first and they will have to document/record any relevant information to ensure it is passed to the next teacher to prevent unnecessary repeating beyond a quick recap/check that the learning is secure.

Children who have learnt different written calculation methods outside school will have their understanding checked through practising our set methods in each year group to ensure their understanding of number is secure (with teaching for mastery in mind). If this is secure, then they will be able to continue to use either method.

Aims of Mathematics within the Primary National Curriculum

The National Curriculum for Mathematics aims to ensure that all pupils

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

(National Curriculum 2013)

The Curriculum

All pupils are taught the content and skills as set out in the Early Years Foundation Stage (EYFS) document (in particular the Mathematics areas of learning) and then the programmes of study in the National Curriculum.

Our Mathematics 'curriculum pack' includes

- our content progression document from Reception to Year 6 by maths strand
- a year group-specific overview displaying relevant content and strands
- our calculation policy
- our fluency progression document detailing how fluency is developed across key areas of number from Reception to Year 6

Additional information specific to Mathematics

Resources, teaching and continuing professional development

The school uses a wide range of maths resources, including tangible resources and online resources.
Mathematics across the school is planned and taught by class teachers.
The Mathematics Subject leader attends appropriate training and/or networks for the subject area. Training is then shared with other staff through staff meetings and team teaching.

Enrichment: Wider Opportunities

The school provides a range of wider opportunities to enrich the mathematics curriculum provided in the classroom, for example:

- opportunities for the most able children to participate in additional workshops or challenges such as the junior maths challenge and Royal Institution workshops
- termly times tables challenges in KS2
- cross-curricular opportunities where maths skills are applied across the curriculum
- use of high-quality websites, like Nrich and NCETM, to set appropriate maths-rich activities in lessons
- use of interventions, in a tailored format, to support children with fluency

Review

This statement will be reviewed by the school's Mathematics Subject Leader every three years to ensure that it is a reflection of current best practice.