LATCHMERE
ACADEMY TRUST

Maths Policy

(To be read in conjunction with the Calculation Policy)

Status	Curriculum
Review Cycle	Annual
Date written/ last review	September 2019
Date of next review	September 2020

NB: Throughout this document Latchmere Academy Trust may be abbreviated to "LAT"

Introduction

We aim to provide a variety of experiences which will encourage children throughout the school to reach their full mathematical potential by developing a positive and confident attitude towards mathematics.

Mathematics helps us to understand and make sense of the world in which we live. It provides a precise means of communication, using numbers, symbols and shapes. It is both worthwhile and fun to use and manipulate mathematics, since it is all around us.

The new National Curriculum in England: programmes of study (2014) inform our mathematics teaching. We draw upon a range of carefully chosen resources in our delivery of the subject.

At Latchmere Academy Trust, we believe that mathematics permeates the curriculum and:

- should be a motivational force throughout the school;
- equips pupils with intellectual and practical skills to understand and make decisions about everyday life;
- is important in helping pupils to access learning and make good progress across the curriculum;
- is a creative discipline that can stimulate moments of wonder, for example when connections are made and patterns are generated;
- develops pupils' capacity to think, reason and solve problems in a clear and logical way;
- is best learnt through direct experience and the opportunity to discuss mathematical ideas and develop mathematical language;
- is an entitlement for all children and develops mathematical, kinaesthetic, linguistic, visual and interpersonal forms of intelligence.

The Key Objective:-

- is to create numerate children who are able to use mathematics effectively as a tool in their lives.

Therefore, we aim to:

- develop a positive attitude towards mathematics, thus increasing children's confidence in and awareness of their own mathematical abilities
- provide children with a secure foundation of mathematical skills which they can utilise across other areas of the curriculum
- meet the varying needs and interests of children to enable them to reach their full potential by employing a range of teaching approaches linked to different learning styles
- develop a range of computational skills which can be used to solve number problems in a variety of contexts
- develop the use of appropriate mathematical language in order for them to communicate with precision

- to give regular opportunities to discuss and debate mathematical concepts
- encourage logical and systematic thinking, and promote mathematical inquiry, investigation and initiative
- develop children's economic awareness

When teaching mathematical skills, we aim to ensure our children:

- have a sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- calculate accurately and efficiently, both mentally and with pencil and paper, drawing on a range of calculation strategies
- make sense of number problems and recognise the operations needed to solve them
- explain their methods and reasoning using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring, and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- recognise when it is appropriate to use IT, and to be able to do so effectively

Information Technology

- The children's mathematical skills are enhanced through regular employment of IT. Interactive resources are used to introduce and consolidate concepts where they can stimulate and motivate children, and where they can convey mathematical ideas and promote thinking more effectively than through other media. Children can also practise mathematical concepts using carefully selected games.
- When calculators are used, these help to deepen children's understanding of concepts and promote further mathematical thinking. They are taught how to decide when it is, and when it is not, appropriate to use a calculator. Children draw upon their skills of rounding, estimating, approximating and checking results to ensure the accuracy of their answers when using calculators.

Inclusion

We ensure every pupil has the opportunity to experience success in learning and to achieve as high a standard as possible. All children are entitled to access the mathematics curriculum and make progress through appropriately differentiated work. We maintain the same high expectation of achievement for all focus groups of children.

Our planning takes into account children of all abilities, including those with Special Educational Needs and Disability (SEND). A range of strategies are employed throughout the school, utilising staff expertise both in and out of the classroom setting.

Part of the pupil premium grant goes towards funding some of the following interventions Examples include multi-sensory strategies to engage children, 'booster'/'focus' groups,1:1 tuition and able mathematician sessions.

Assessment

- Children are continually assessed in a variety of ways, with AfL at the heart of the process
- Ongoing informal assessment takes place during each lesson through questioning and the provision of collaborative activities to engender pupil discussion
- A dialogue is maintained between teacher and pupil with children reflecting on their learning through oral and written comments
- Formative tests are administered at agreed points during the academic year
- Assessment data feeds into Target Tracker, allowing the monitoring of individual children as they progress through the school
- PPG/SEND pupils have additional monitoring to assess their progress.

Resources

- Practical apparatus is used to support the teaching of mathematics: this includes number lines, number squares, place value cards, dice, etc.
- Basic items are available in each classroom whereas other pieces of equipment are housed centrally
- We make effective use of a range of published materials and those available electronically which allows flexibility in the planning and delivery of mathematics. These include photocopiable resources

Home/School Links

We extend opportunities for learning mathematics by providing regular activities for children to work on at home.

These include:

- playing a game to reinforce recently taught concepts
- practising a computational strategy, mental or written, by working through examples
- learning number facts or multiplication tables, as promoted by the weekly 'Good Times' challenge from the end of Year 1 upwards
- applying knowledge to solving problems or investigations

The annual Record of Achievement gives parents details of progress made by the children, including test results where applicable. Parents are invited to consultation evenings during the course of the year where there is an opportunity to discuss children's progress.Occasional maths mornings or evenings are held for parents.

Conclusion

We aim, through our teaching of mathematics, to give all children a secure foundation from which they can pursue a passion for mathematics.