

BISHOP ROAD  
PRIMARY SCHOOL

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# MATHEMATICS

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Here at Bishop Road we strive to nurture confident mathematicians. In tandem, we teach to develop both fluency and a deep and adaptable understanding of maths. We aim for maths to be an enjoyable subject within which all children can make expected progress.

Making mistakes is an essential part of learning. We strive to help support all pupils overcome misconceptions and master procedures and concepts.





# CURRICULUM STATEMENT

To engage, inspire and challenge pupils to become confident mathematicians who can work independently and collaboratively. We teach children to calculate efficiently, acquire mathematical knowledge and understanding and to apply what they have learnt to reason and solve problems.



## WHAT DOES MATHEMATICS LOOK LIKE AT BISHOP ROAD?

- Yearly maths overviews ensure national curriculum coverage of the different areas is proportionate in content and allows for topics to be revisited to secure and deepen understanding and develop mathematical curiosity.
- We value the importance of teachers imparting subject knowledge and procedural methods and for children to complete varied practice.
- Where necessary, we differentiate tasks to provide a balance of confidence building success and to develop mathematical perseverance.
- We scaffold learning by making use of hands-on opportunities and pictorial images which prepares children for more abstract representations.

## ENRICHMENT OPPORTUNITIES

- About three times a year, children benefit from learning maths through high quality picture books. These maths days provide engaging contexts for children to undertake low ceiling high threshold mathematical tasks, undertake practical activities and do creative and contextualised mathematical activities.
- We take part in Maths Week England where children attend online mathematical workshops and complete follow up tasks.
- Additional enrichment and challenge is provided by way of weekly maths challenges and some KS2 pupils take part in external maths challenges.



## DAILY MATHS LESSONS

- Lessons start with a low states starter activity to link previous learning.
- Teachers provide input to explain the maths, key vocabulary to prepare pupils for the task that follows.
- Tasks may involve children working interpedently or collaboratively and involve the development of mental and written arithmetic (fluency) or focus on applying methods and knowledge to develop reasoning and problem solving.
- Where needed, mathematical practice is differentiated to support all children learn, development mathematical confidence and enjoy maths.
- Concrete objects and visual images help scaffold learning to develop understanding and prepare them for more abstract concepts and representations.
- There is an opportunity to recap on learning in the lesson, and address any misconceptions that arise. Those secure in the learning have the opportunity to complete a 'next step' activity or they may take on the weekly maths challenge.
- The end part of lessons provide an opportunity for lighter mathematical activities to revisit the fundamental knowledge and fluency needs which help support all children learn age related content.

### CONTRIBUTING THROUGH MATHS

We believe that everybody plays an important role in their community. In maths, children learn to show initiative in solving problems, to think independently and show perseverance. They learn that maths is essential to their own individual success and helps contribute to others in everyday life.

# SUBJECT SPECIFIC TEACHING AND LEARNING APPROACHES

In mathematics lessons at **Bishop Road** you will see:

Focussed teacher input  
and purposeful  
mathematical  
conversation.

Children are encouraged to be accurate  
in what they do and check their work.

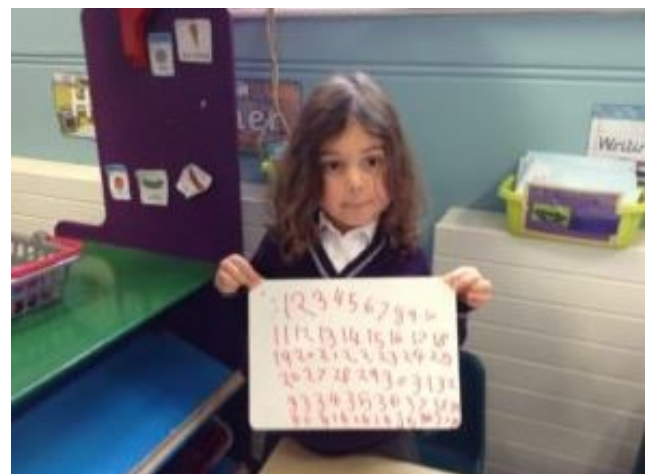
Teachers use formative assessment (such  
as live marking) to identify misconcep-  
tions and address these.

Clear focus on precise  
mathematical vocabulary.

Concrete, pictorial and  
abstract representations.

Learning is broken down into small con-  
nected steps that unfold the concepts  
within a sequence of lessons.

Appropriate differentiation devel-  
ops confidence and provides chal-  
lenge and progress for all.





# PRIMARY RESOURCES

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TARGET YOUR MATHS is the main text book which provides graduated levels of challenge for year group objectives. Linked to this, the school subscribes to the Elmwood Digital library which allows Target Your Maths to be displayed electronically and provides access to other textbooks too.

Each classroom has an interactive whiteboard and visualiser that allows the teacher to accurately explain the maths and complete worked examples. The school has a range of hands-on equipment and mathematical themed picture books to support learning.

TIMES TABLE ROCKSTARS is an enjoyable online times table game where children can create an avatar and earn game coins by correctly answering times table questions. They can use these coins to obtain new costumes and accessories for their avatar and teachers can set which times tables they would specifically like their classes to be practising.

Teachers use websites such as NRICH to design weekly maths challenges for inquisitive minded children to deepen and stretch their mathematical experiences.

NFER create the assessment papers which are used throughout KS2 to track progress and attainment.

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# OUTCOMES

Teaching children to record workings and answers clearly and logically is vital for their mathematical development. Children need to grow confident to set work out themselves and take pride in being accurate in what they do.



Children's books will follow these principles :

- Pages should be set out with a two-square margin drawn neatly with a ruler.
- The short date and learning objective should be written at the top of the page and underlined with a ruler.
- One digit should be written in each box when recording numbers. This does not apply to letters when writing words or sentences.
- Workings should be laid out neatly and positioned directly above, below, or next to the sum or problem. Errors in working should be neatly crossed out with a single line.
- Feedback, marking and children's response to marking is provided by teachers in line with our school policy.

# ASSESSMENT, MONITORING AND EVALUATION



- Low stakes starter activities help link content and assess if learning is secure from the previous lesson. Similarly, end of lesson activities that revisit fundamental aspects of the curriculum provide formative assessment opportunities for teachers to prepare for forthcoming topics.
- Teachers monitor children's progress and adapt planning and teaching to ensure progression and challenge for all.
- Assessment of the children's work is on-going to ensure that understanding is being achieved and that progress is being made, through marking of work in books and through a variety of AFL strategies in lessons, including verbal discussion, questioning, live marking, answers on whiteboards and 'mini plenaries'.
- Formal assessment takes place three times per year in the form of written assessment papers (KS2) or a mixture of dictated and written questions (KS1). These results are complemented by the on-going teacher assessment to track each child's progress and the data is analysed by class teachers and year group leaders to decide on next steps in learning.
- Effort and attainment is reported to parents at the end of each academic year:
  - \* For efforts: 1– excellent, 2– good or 3- requires improvement; and
  - \* For attainment in relation to national curriculum expectations: working towards expectations; working at the expected level; or working at greater depth within the expected standard.



# ENGAGING WITH PARENTS

**We encourage parents to take an active interest in their children's mathematical education by supporting them in the following ways:**

Supporting children with any homework they receive.

Help develop children's mathematical vocabulary by talking about mathematical words that arise in everyday life.

Having positive conversations about maths with your child to develop mathematical confidence.

Help to teach your child 'life skills' and develop mathematical curiosity. For example:

- learning to tell the times;
- reading timetables;
- handling money;
- drawing using a ruler; and
- estimating and measuring. For example, when cooking.

Helping children to learn and retain key facts such as number pairs, times tables and related facts.

