

## Achieve, Believe, Create and Fly High

# Subject: Maths

### Intent

At Dodford First School, we believe that all children have the potential to become confident, competent mathematicians. Our aim is for all children to leave Dodford at the end of year four with strong foundations in the fundamentals of mathematics, with good conceptual understanding and an independence and accuracy in applying procedures, ready for their next steps into middle school.

#### **Curriculum Drivers**

Achieve - Have high aspirations, striving for success and never giving up. You can learn anything you want to! Believe - Believe in yourself and value your own self-worth. To keep trying even when it is hard; learn from others and your mistakes. Create - Action your thoughts and bring something into existence. Allow your creativity to flow; investigate, experiment, and invent. Fly High - Have the courage to embrace new experiences and take risks. Share your knowledge with others. Enable yourself to flourish.

## Characteristics of a mathematician:

- An understanding of the important concepts and an ability to make connections within mathematics.
- A broad range of skills in using and applying mathematics.
- Fluent knowledge and recall of number facts and the number system.
- The ability to show initiative in solving problems in a wide range of contexts, including the new or unusual.
- The ability to think independently and to persevere when faced with challenges, showing a confidence of success.
- The ability to embrace the value of learning from mistakes and false starts.
- The ability to reason, generalise and make sense of solutions.
- Fluency in performing written and mental calculations and mathematical techniques.
- A wide range of mathematical vocabulary.
- A commitment to and passion for the subject.

Implementation

Our pupils should be able to organise their knowledge, skills and understanding around the following learning hooks:

- Know and use numbers
- Add and subtract
- Multiply and divide
- Use fractions
- Understand the properties of shapes
- Describe position, direction and movement
- Use measures
- Use statistics
- Use algebra

As a school, our approach to maths is teaching for mastery. We believe that everybody has the potential to be successful and competent in maths, regardless of prior experience and attainment.

To further improve quality and consistency of our maths provision, we have implemented White Rose Maths as our scheme of learning.

Our enthusiastic teachers employ a small steps approach to teaching maths, ensuring that children have been successful before moving onto the next step of their maths journey. Children are challenged to think deeply, reason and problem solve in all lessons. Teachers ensure that the White Rose Maths scheme has been revised and adapted appropriately, to meet the needs of the children in their class. Furthermore, formative assessment is threaded throughout every lesson, enabling teachers to address misconceptions as they arise and adapt future learning to continue to meet the needs of their class.

In EYFS, the children receive taught sessions, as well as stimulating and varied enhanced provision with free-flow activities.

In KS1 and KS2, maths learning take place through one whole class lesson per day for four days. This is supplemented with daily number fluency and practice sessions which provide the opportunity to practise key number skills and develop rapid recall of known facts

### Impact

#### Assessment

Through the explicit teaching of the Mathematical skills, both the teachers and the pupils assess their learning continuously throughout the lesson. Our assessment systems enable teachers to make informed judgements about the depth of their learning and the progress they have made over time.

### **Pupil Voice**

"I love maths, my favourite part is learning times tables." Year 4

"I use my maths mat to help me when I am stuck." Year 3

"I use Numicon and base ten to help me." Year 2

"My teacher explains things to me so I can understand it." Year 2

"If I am stuck I use my brain first, then my bits and bobs, my buddy and then the boss (my teacher)." Year 3

Snapshots

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Pupil Voice

What xxx looks like at Dodford First School

Photographs

Disclaimer: This has been developed with reflection upon the National Curriculum (2014) and Chris Quigley's Essential Curriculum.