Maths in Foundation 2

White Rose Maths

EYFS Maths- Number and Number Patterns (Educational Programme & Early Learning Goals)

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

ELG: **Number**

Children at the expected level of development will:

Have a deep understanding of numbers to 10, including the composition of each number

- Develop the key skills of counting objects including how many there after counting (cardinal counting principle).
- Use everyday routines to hear counting and to count, such as register time, tidying up, lining up or counting out pieces of fruit at snack time.
- Listen to and sing counting songs and number rhymes.
- Listen to stories and play games that involve counting.
- Recognise small quantities in familiar patterns (e.g. dice) and random arrangements.
- Learn the composition of 2, 3, 4 and 5 before moving onto larger numbers.

ELG: Number

Children at the expected level of development will:

Subitise (recognise quantities without counting) up to 5

- Recognise the number of objects in five frames and then ten frames to begin to become familiar with the tens structure of the number system.
- Subitise first when seeing groups of up to 4 or 5 objects.
- Recognise numerals in order alongside dot quantities or tens frame arrangements.
- Play card games with cards where some have numerals, and some have dot arrangements.
- Record quantities (e.g. scores in games), such as tallies, dots and using numeral cards.
- Use a range of visual models of numbers e.g. six as double three on dice, or the fingers on one hand and one more, or as four and two with ten frame images.
- Recognise the parts within a whole.
- Play games that involve partitioning and recombining sets e.g. throw 5 beanbags, aiming for a hoop. How many go in and how many do not?

ELG: Number

Children at the expected level of development will:

Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts

- Learn number bonds through hands-on experiences of partitioning and combining numbers in different contexts.
- Play hiding games with a number of objects e.g. “6 went in the tent and 3 came out. I wonder how many are still in there?”
- Recognise when they have been given the wrong number of things e.g. ask each child to plant 4 seeds then give them 1, 2 or 3.
- Spot and use opportunities to apply number bonds.
- Recognise objects on a five frame and talk about how many spaces are filled and unfilled.

ELG: Numerical Patterns

Children at the expected level of development will:

Verbally count beyond 20, recognising the pattern of the counting system

- Count verbally beyond 20.
- Use number tracks, calendars and number squares, to become familiar with two-digit numbers and start to spot patterns within them.
- Compare quantities, starting with groups of objects with a noticeable difference and including groups with the same number of objects.

ELG: Numerical Patterns

Children at the expected level of development will:

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

- Use comparative language: 'more than', 'less than', 'fewer', 'the same as', 'equal to'.
- Make predictions about what the outcome will be in stories, rhymes and songs if one is added, or if one is taken away.
- Use 'staircase' patterns, e.g. to show that the next number in the sequence includes the previous number plus one.

ELG: Numerical Patterns

Children at the expected level of development will:

Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

- Share objects fairly.
- Make and test predictions.
- Make patterns with varying rules (including AB, ABB and ABBC) and objects and invite children to continue the pattern.
- Explore and discuss how to fix a mistake.

Foundation Maths Information Session

Welcome

Good afternoon everyone and thank you for coming.

Today we'd like to share how we teach maths in Foundation using the White Rose Maths approach, and how you can support your child at home.

What Maths Looks Like in Foundation

In Foundation, maths is about much more than counting. We focus on helping children develop a deep understanding of numbers, patterns, shapes and problem-solving through practical experiences and play.

The White Rose Maths scheme encourages children to:

- Understand numbers, rather than just recite them.
- Notice patterns and relationships.
- Talk about their mathematical thinking.
- Explore maths through hands-on activities and real-life situations.

How We Teach Maths

Children learn through:

- Whole-class carpet sessions.
- Practical activities using objects and resources.
- Maths within continuous provision and play.
- Adult-supported games and investigations.
- We spend time exploring a small number of concepts in depth so that children develop confidence and understanding before moving on.

Key Areas We Focus On

During Foundation, children learn to:

- Count accurately and understand what numbers represent.
- Recognise and compare quantities.
- Explore number bonds and early addition and subtraction.
- Identify, describe and create patterns.
- Learn about shape, space and measure.
- Develop mathematical language such as more, fewer, equal, longer, shorter, heavier and lighter.

Supporting Maths at Home

You do not need worksheets or formal lessons. Everyday experiences provide wonderful opportunities for maths learning.

You could:

- Count steps, toys or pieces of fruit.
- Spot numbers in the environment.
- Compare quantities when setting the table.
- Talk about shapes you see around you.
- Sing counting rhymes and number songs.
- Play simple board games that involve counting and turn-taking.
- The most important thing is talking about maths and making it enjoyable.

Final Message

Our aim is for children to become confident, curious mathematicians who are willing to have a go, make mistakes and learn from them.

By working together between home and school, we can help your child develop a strong foundation for future mathematical learning.

Thank you for coming.

We are happy to answer any questions and share some examples of the resources and activities we use in Foundation.