The 2014 National Curriculum for Maths aims to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

At Berewood, these skills are embedded within Maths lessons and developed consistently over time, ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

We aim to build an environment in which all children will enjoy Mathematics; their curiosity about the subject will develop and they will experience success in the subject. They will gain the ability to reason mathematically and solve problems with confidence, developing their resilience.

**Topic Overview...**

**To support with progression and coverage, we use and adapt the White Rose Maths Schemes of Learning. Please see the parent and pupil information section of the WRM Hub website for more information : https://whiterosemaths.com/advice-and-guidance**

**Year 6 Scheme of Learning:**

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | Number: Place Value | | Number: Addition, Subtraction, Multiplication and Division | | | | | Number: Fractions | | | | Geometry: Position and Direction |
| **Spring** | Number: Decimals | | Number: Percentages | | Number: Algebra | | Measurement: Converting Units | Measurement: Perimeter, Area and Volume | | Number: Ratio | | Statistics |
| **Summer** | Geometry: Properties of Shape | | Consolidation or SATs preparation | | Consolidation, investigations and preparations for KS3 | | | | | | | |

Please talk to your children about the information on this sheet. The more children discuss their learning the more likely they are to embed the learning to their memory. If you have any questions please don't hesitate to contact your child's class teacher.

## Place Value and Number

Know and use all times tables

Use numbers up to the millions as well as negative numbers

Convert between decimals, percentages and fractions

Add, subtract, multiply and divide fractions

## Add and Subtract using Decimals

$$5.25$$
$$+1.66$$
$$\overline{6.81}$$
$$1$$

$$4.38$$
$$-1.27$$
$$\overline{3.11}$$

## Division (decimals) and Long Division

$$0\ 8\ 6\ 1\ .\ 5\ r\,4$$
$$8\overline{)6\ ^6 8\ ^4 9\ ^1 2\ .\ ^4 0}$$

Write out the 13 times table to help you!

| | |
|---|---|
| 13 | |
| 26 | |
| 39 | |
| 52 | |
| 65 | |
| 78 | |

$$6\ 3\ 6\ 2$$
$$13\overline{)8\ 2\ 7\ 1\ 6}$$
$$-\ 7\ 8\ \downarrow$$
$$\quad 4\ 7\ \downarrow$$
$$-\ 3\ 9\ \downarrow$$
$$\qquad 8\ 1$$
$$-\ 7\ 8\ \downarrow$$
$$\qquad\quad 3\ 6$$
$$-\ 2\ 6\qquad r\ 1\ 0$$

## Multiplication (up to 4 digits x 2 digit and with decimals)

| 3 | • | 4 | 5 |
|---|---|---|---|
| | × | | 6 |
| 0 | • | 3 | 0 |
| 2 | • | 4 | 0 |
| 1 8 | • | 0 | 0 |
| 2 0 | • | 7 | 0 |

## What can you do to help?

### Number and Place Value

Ask the question: 'The answer is 10 (or any number), what's the question?' Possible responses: 8 plus 2; 1 million divided by one hundred thousand; 5 x 2 ; 25 – 15; 2.5 times 4; the number before 11; 9999 subtract 9989 ; the square root of 100 etc.

A good knowledge and quick recall of times tables is essential to children's mathematical progress. The children are taught up to 12 x 12. The target is for all children to know their tables by the end of year four. It is very important that children practice their times tables daily at home. When learning their tables, children are taught to look for the reversible effect so that they know 6 x 2 is the same as 2 x 6. They are also taught the relationship with division so that knowing 6 x 2 = 12 means they also know that 12 ÷ 2 = 6 and 12 ÷ 6 = 2.

Times tables - Say together the six times table forwards, then backwards. Ask your child questions, such as: Nine sixes? How many sixes in 42? Six times four? Forty-eight divided by six? Three multiplied by six? Six times what equals sixty? Repeat with other times tables.

Ask 'progressive' calculations, e.g. 7 + 6, 17 + 6, 27 + 6, 47 + 6, 147 + 6; 5 x 2, 50 x 2, 500 x 2, 500 x 20.

Rhymes - Make up rhyme together to help your child to remember the harder times-tables facts, e.g. 6 x 7 = 42 phew! 7 x 7 = 49 fine! 6 x 8 = 48 great!

Card game. Use a pack of playing cards. Take out the jacks, queens and kings. Take turns. Take a card and roll a dice. Multiply the two numbers. Write down the answer. Keep a running total. The first to go over 301 wins!

Target 1000. Roll a dice 6 times. Use the six digits to make two three-digit numbers. Add the two numbers together. How close to 1000 can you get?

Guess my number. Choose a number between 0 and 1 with one decimal place, e.g. 0.6. Challenge your child to ask you questions to guess your number. You may only answer 'Yes' or 'No'. For example, he/she could ask questions like 'Is it less than a half?' See he/she can guess your number in fewer than 5 questions. Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6.

Pairs to 100. This is a game for two players. Each draw 10 circles. Write a different two-digit number in each circle – but not a 'tens' number (10, 20, 30, 40…). In turn, choose one of the other player's numbers. The other player must then say what to add to that number to make 100, e.g. choose 64, add 36. If the other player is right, she crosses out the chosen number. The first to cross out 6 numbers wins.

### Everyday situations

How much? While shopping, point out an item costing less than £1. Ask your child to work out in their head the cost of 3 items. Ask them to guess first. See how close they come. If you see any items labelled, for example, '2 for £3.50', ask them to work out the cost of 1 item for you, and to explain how they got the answer.

Weighing, measuring capacity and timing when cooking. Converting a recipe for 4 people to one for 8 people. (Scale a recipe up or down to feed the right amount of people.)

Talking about time, e.g. How long is it until lunch time? The journey takes 2½ hours, when will we arrive? We need to be there at 2.00 pm, when do we need to leave home? Many children will still need practice with reading clock times, particularly minutes past and minutes to the hour.

Handling amounts of money when shopping, working out total costs, working out change, checking receipts. Working out prices of sale items, e.g. 20% off. Managing pocket money and saving for things.