



Wearhead Primary School

Headteacher: Karen Evans BA (Hons) P.G.C.E N.P.Q.H

Wearhead, Co. Durham, DL13 1BN Tel: 01388 537265

wearhead@durhamlearning.net w.w.w.wearhead.durham.gov.uk

"THE SMALL SCHOOL WITH A BIG HEART"

Maths

Years 1 and 2

The principal focus of maths teaching at Key Stage 1 is to ensure that our pupils develop confidence and mental fluency with whole numbers, counting and place value. They will work both in numerals and words and will use practical methods for counting and calculating.

Work covered will include:

- Counting in steps of 2, 3, 5 and 10
- Recognising and using basic fractions
- Use of four number operations for simple calculations
- Recognising, describing and comparing simple 2D and 3D shapes
- Using a range of measures for length, mass, volume, time and money

By the end of Key Stage 1 children should:

- Know all number bonds to 20
- Use and understand place value for up to 3 digit numbers
- Have secure recognition and understanding of mathematical signs
- Recall and use multiplication/division facts for 2, 5 and 10 times table
- Use standard units of measure with increasing accuracy

Year 3 and Year 4

The principal focus of maths teaching in Years 3 and 4 is to ensure that our pupils become increasingly adept at working with the four number operations and deepen their understanding of place value. All teaching is designed to develop efficient written and mental methods with increasingly large numbers.

At this stage pupils will begin to develop their ability to solve multiple step problems. They will also become more familiar with fractions and decimal place value. Pupils will learn to use measuring instruments accurately and link measures to their work in number.



Work covered will include:

- Use of all four number operations with numbers up to 4 digits
- Understanding inverse operations
- Solving problems involving multiplication, division and fractions
- Finding fractions of quantities
- Understanding tenths as fractions and decimals
- Accurate use of units of measure
- Time in analogue and digital/24hour clock (including knowledge of Roman Numerals)
- 2D and 3D shape
- Simple angles

By the end of Year 4 pupils should:

- Work confidently with numbers up to 4 digits
- Recall multiplication and division facts up to 12×12
- Work with simple fractions and their decimal equivalent
- Calculate area and perimeter of rectangles
- Compare and classify geometric shapes
- Read coordinates on a grid
- Interpret and present data on bar charts and line graphs

Year 5 and Year 6

In upper Key Stage 2 teaching is focussed on extending pupils' understanding of the number system and place value to include larger integers. This will develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

Pupils will be taught to develop their ability to solve a wider range of problems, including increasingly complex properties of numbers that demand efficient written and mental methods of calculation. Algebra will be introduced for problem solving. Teaching in geometry and measures will consolidate and extend knowledge in in number.



Work will include:

- Understanding place value to 1,000,000
- Negative numbers
- Formal methods of addition and subtraction numbers beyond 4 digits
- Factors and prime numbers
- \times and \div of numbers up to 4 digits including long multiplication
- Decimal/fraction/percentage equivalents
- Mixed numbers and improper fractions
- Numbers up to 3 decimal places
- Measuring and calculating area and perimeter of composite shapes
- Solving problems involving units of measure
- Drawing and measuring angles accurately
- Interpreting data (including mean & range) and drawing graphs including pie charts

By the end of Year 6 pupils should:

- Use formal methods for all 4 number operations including \times and \div of 4 digit number by 2 digits.
- Solve multi operation word problems in contexts
- Simplify fractions, compare and order fractions
- Multiply and divide numbers up to 3 decimal places by 10, 100 and 1000
- Recall equivalences between fractions, decimals and percentages
- Calculate percentages of quantities in context
- Solve problems of ratio and proportion
- Calculate areas of parallelograms and triangles
- Draw accurate 2D shapes given dimensions and angles
- Use mathematical language for parts of circles
- Calculate missing angles in geometrical drawings and regular polygons
- Use all 4 quadrants on a grid to translate and reflect shapes
- Understand simple algebra

