Bolshaw Primary School

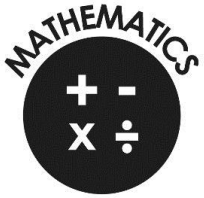
END OF YEAR EXPECTATIONS

Information for Parents

This booklet provides information for parents and carers on the end of year expectations for children in Year 5 in our school. The National Curriculum outlines these expectations as being the minimum requirements your child must meet in order to ensure continued progress.

All the objectives will be worked on throughout the year and will be the focus of direct teaching. Any extra support you can provide in helping your children to achieve these is greatly valued.

If you have any queries regarding the content of this booklet or want support in knowing how best to help your child please talk to your child's teacher.



Successful Learners *Confident Individuals* *Effective Contributors* *Responsible Citizens*

YEAR 5 - MATHS

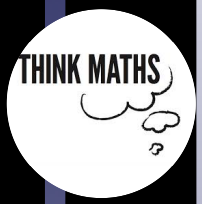
Maths

By the end of Year 5 your child is expected to be competent in following areas:

Number and Place Value

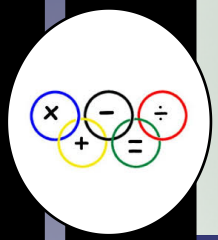
* to read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit
* to count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000
* to interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through0
* to round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000

to solve number problems and practical problems that involve all of the above
to read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.



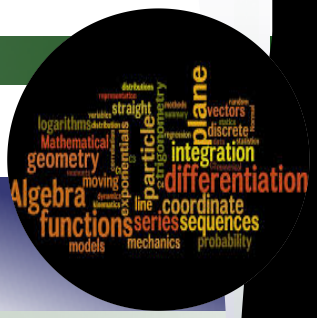
Addition and Subtraction

* to add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
* to add and subtract numbers mentally with increasingly large numbers
* to use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
* to solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.



Multiplication and Division

* to identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
* to know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
* to establish whether a number up to 100 is prime and recall prime numbers up to 19
* to multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
* to multiply and divide numbers mentally drawing upon known facts
* to divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
* to multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000
* to recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3})
* to solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes
* to solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
* to solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.



Fractions

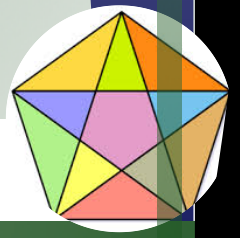
(including decimals and percentages)

* to compare and order fractions whose denominators are all multiples of the same number
* to identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
* to recognise missed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number (for example, 2/5 + 4/5 = 6/5 = 1 1/5)
* to add and subtract fractions with the same denominator and denominators that are multiples of the same number
* to multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
* to read and write decimal numbers as fractions (for example, 0.71 = 71/100)
* to recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
* to round decimals with 2 decimal places to the nearest whole number and to 1 decimal place
* to read, write, order and compare numbers with up to 3 decimal places
* to solve problems involving number up to 3 decimal places
* to recognise the per cent symbol (%) and understand that per cent relates to "number of parts per 100", and write percentages as a fraction with denominator 100, and as a decimal fraction
* to solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and fractions with a denominator of a multiple of 10 or 25.

Measurement

*to convert between different units of measure (for example, kilometre and metre, centimetre and metre, centimetre and millilitre, gram and kilogram, litre and millilitre)
* to understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
* to measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
* to calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
* to estimate volume (for example, using 1 cm^3 blocks to build cuboids [including cubes]) and capacity (for example, using water)
* to solve problems involving converting between units of time

* to use all four operations to solve problems involving measure using decimal notation including scaling (for example, length, mass, volume, money).



Properties of Shape

*** to identify 3-D shapes, including cubes and other cuboids, from 2-D representations**

*** to know angles are measures in degrees: estimate and compare acute, obtuse and reflex angles**

*** to draw given angles, and measure them in degrees (°)**

*** to identify:**

- angles at a point and 1 whole turn (total 360°)
- angles at a point on a straight line and half a turn (total 180°)
- other multiples of 90°
- use the properties of rectangles to deduce related facts and find missing lengths and angles
- distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

Position and Direction

*** to identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.**

Statistics

*** to solve comparison, sum and difference problems using information presented in a line graph**

*** to complete, read and interpret information in tables, including timetables.**