Maths Parent workshop

EYFS & KS1

When is maths taught?

Fun Maths Friday! In nursery.

Daily in Reception, Year 1 and Year 2.

Maths in the provision in Nursery and Reception

What are we working towards in EYFS
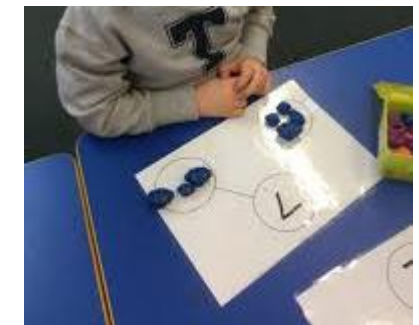
Mathematics

ELG: Number

Children at the expected level of development will:

- Have **a deep understanding of number to 10**, including the composition of each number;
- **Subitise** (recognise quantities without counting) **up to 5**;
- **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.

ELG: Numerical Patterns

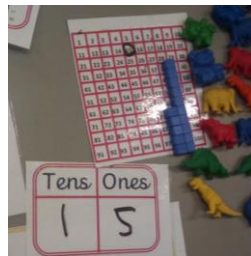Children at the expected level of development will:

- **Verbally count beyond 20**, recognising the pattern of the counting system;
- **Compare quantities up to 10** in different contexts, recognising when one quantity is **greater than, less than or the same** as the other quantity;
- **Explore and represent patterns** within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

National Curriculum- Year 1 Program of study Number and Place Value
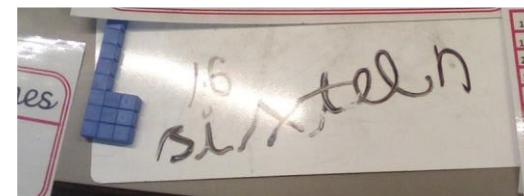
Pupils should be taught to:

- **Count to and across 100,** forwards and backwards, beginning with 0 or 1, or from any given number
- **Count, read and write numbers to 100** in numerals; count in multiples of **twos, fives and tens**
- Given a number, **identify one more and one less**
- Identify and represent numbers using **objects and pictorial representations** including the number line, and use the language of: **equal to, more than, less than (fewer), most, least**
- **Read and write** numbers from **1 to 20** in numerals and words.

National Curriculum- Year 2 Program of study Number and Place Value
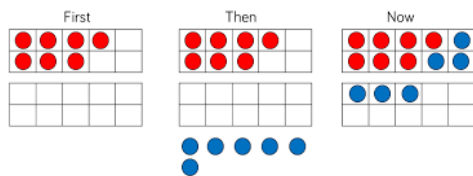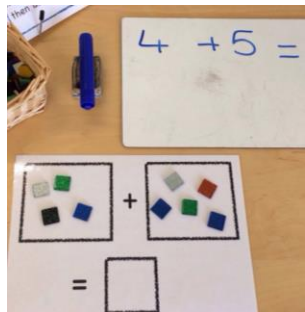
Pupils should be taught to: -

- **count in steps of 2, 3, and 5** from 0, and in **tens** from any number, forward and backward
- recognise the **place value** of each digit in a two-digit number **(tens, ones)**
- identify, represent and **estimate numbers** using different representations, including the number line
- **compare and order** numbers from 0 up to 100; use and = signs
- **read and write numbers** to **at least 100** in numerals and in **words**
- -use place value and number facts to **solve problems.**

National Curriculum- Year 1 Program of study Addition and Subtraction

Pupils should be taught to:

- **read, write and interpret** mathematical statements involving addition (+), subtraction (–) and equals (=) **signs**
- **represent and use number bonds** and related subtraction facts **within 20**
- **add and subtract** one-digit and two-digit numbers **to 20**, including zero
- **solve one-step** problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems

National Curriculum- Year 2 Program of study Addition and Subtraction

Pupils should be taught to:

Solve problems with addition and subtraction:

- using **concrete** objects and **pictorial** representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of **mental and written methods**
- recall and use **addition and subtraction facts to 20 fluently,** and derive and use related facts up to 100
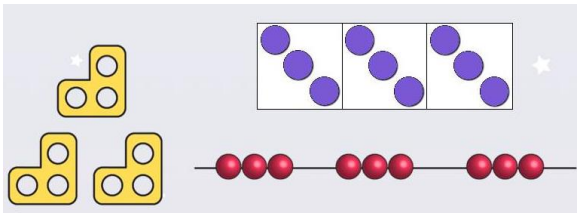
Add and subtract numbers using **concrete objects, pictorial representations, and mentally**, including:

- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers

$$39 + 26 = 65$$

$$65 - 39 = 26$$

- show that **addition of two numbers** can be done in **any order** (commutative) and subtraction of one number from another cannot
- recognise and use the **inverse** relationship between addition and subtraction and use this to check calculations and solve missing number problems.

National Curriculum- Year 1 Program of study Multiplication and Division

Pupils should be taught to:

- solve **one-step** problems involving **multiplication and division**, by calculating the answer using **concrete** objects, **pictorial** representations and arrays with the support of the teacher.

National Curriculum- Year 2 Program of study Multiplication and Division
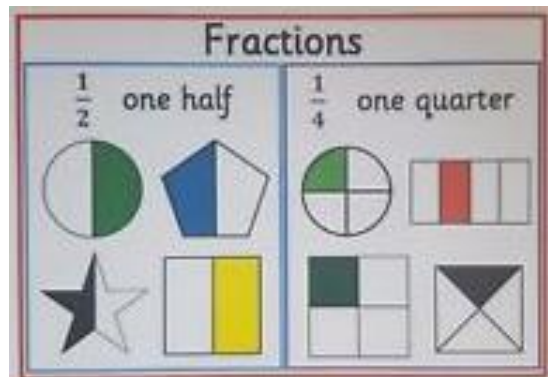
Pupils should be taught to:

- recall and use multiplication and division facts for the **2, 5 and 10 multiplication tables**, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the **multiplication tables** and write them using the multiplication **(×),** division **(÷)** and equals **(=)** signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

National Curriculum- Year 1 Program of study Fraction

Pupils should be taught to:

- recognise, find and name **a half as one of two equal parts** of an object, shape or quantity
- recognise, find and name a **quarter as one of four equal parts** of an object, shape or quantity.

National Curriculum- Year 2 Program of study Fraction

Pupils should be taught to:

- recognise, find, name and write fractions **1/3, 1/4 , 2/4 and 3/4** of a length, shape, set of objects or quantity
- write simple fractions for example, **1/2** of **3/6** and recognise the equivalence of **2/4** and **1/2**

National Curriculum- Year 1 Program of study

Measurement

Pupils should be taught to:

Compare, describe and solve practical problems for:

- **lengths and heights** [for example, long/short, longer/shorter, tall/short, double/half]
- **mass/weight** [for example, heavy/light, heavier than, lighter than]
- **capacity and volume** [for example, full/empty, more than, less than, half, half full, quarter]
- **time** [for example, quicker, slower, earlier, later]

Measure and begin to record the following:

- Lengths and heights
- mass/weight
- capacity and volume
- time (hours, minutes, seconds)
- recognise and know the **value of different denominations of coins** and notes
- **sequence events** in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including **days of the week, weeks, months and years**
- tell the **time to the hour and half past the hour** and draw the hands on a clock face to show these times.

National Curriculum- Year 2 Program of study

Measurement

Pupils should be taught to:

- **choose and use appropriate** standard units to estimate and measure **length/height** in any direction (m/cm); **mass** (kg/g); **temperature** (°C); **capacity** (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- **compare and order lengths**, mass, volume/capacity and record the results using >, < and =
- recognise and use symbols for pounds **(£)** and pence **(p);** combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving **addition and subtraction of money** of the same unit, including giving change
- compare and sequence **intervals of time**
- **tell and write the time** to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
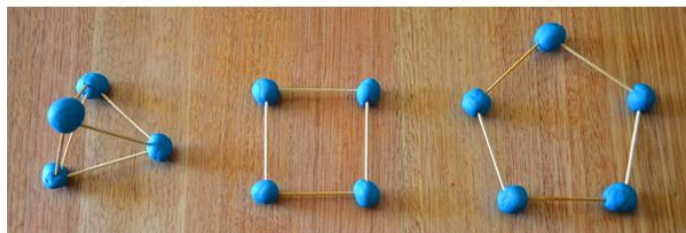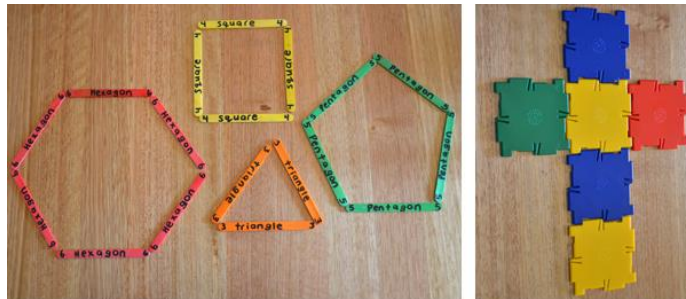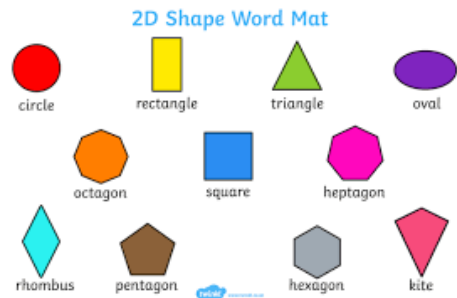- know the number of **minutes in an hour** and the number of **hours in a day.**

National Curriculum- Year 1 Program of study

Properties of shapes

Pupils should be taught to:

Recognise and name common 2-D and 3-D shapes, including:

- 2-D shapes [for example, rectangles (including squares), circles and triangles]
- 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

National Curriculum- Year 2 Program of study

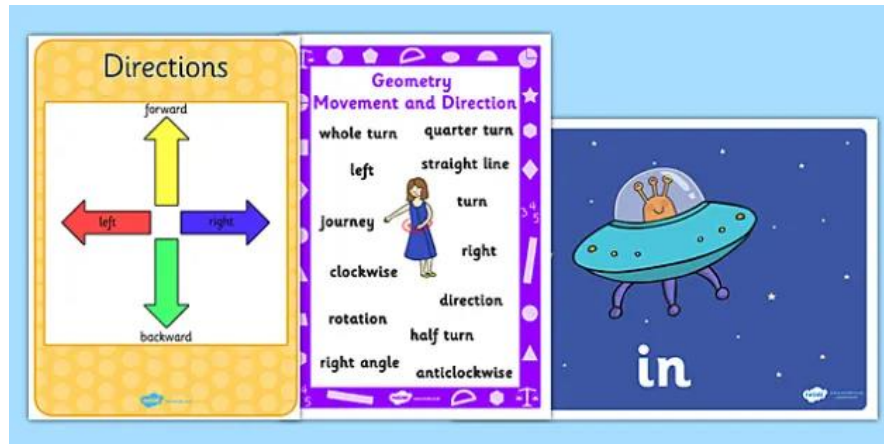**Properties of shapes**

Pupils should be taught to:

- **identify and describe** the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- **identify and describe** the properties of 3-D shapes, including the number of edges, vertices and faces
- **identify 2-D shapes on the surface** of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- **compare and sort** common 2-D and 3-D shapes and everyday objects.

National Curriculum- Year 1 Program of study
Geometry – position and direction
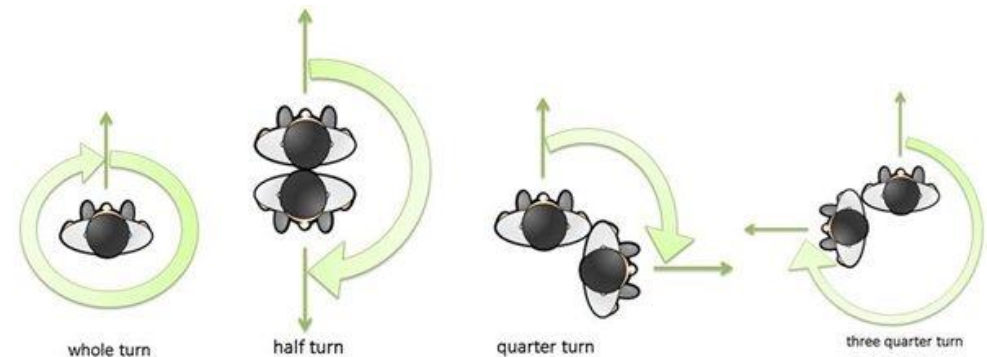Pupils should be taught to:
- describe position, direction and movement, including **whole, half, quarter and three-quarter turns**.

National Curriculum- Year 2 Program of study
Geometry – position and direction
Pupils should be taught to:
-   order and arrange combinations of mathematical objects in **patterns and sequences**
-   use **mathematical vocabulary** to describe position, direction and movement, including movement in a straight line and distinguishing between **rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).**

whole turn   half turn   quarter turn   three quarter turn

National Curriculum- Year 2 Program of study Statistics

Pupils should be taught to:

- interpret and construct simple **pictograms, tally charts, block diagrams and simple tables**
- ask and answer **simple questions** by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data.