

MATHEMATICS AND NUMERACY

KEY STAGE 1

Teachers should enable pupils to develop knowledge, understanding and skills in:

PROCESSES IN MATHEMATICS

Making and Monitoring Decisions

Pupils should be enabled to:

- select the materials and mathematics appropriate for a task;
- develop different approaches to problem solving;
- begin to organise their own work and work systematically.

Communicating Mathematically

Pupils should be enabled to:

- understand mathematical language and be able to use it to talk about their work;
- represent work in a clear and organised way, using symbols where appropriate.

Mathematical Reasoning

Pupils should be enabled to:

- recognise simple patterns and relationships and make predictions;
- ask and respond to open-ended questions;
- explain their way of working;
- know ways to check their own work.

NUMBER

Understanding Number and Number Notation

Pupils should be enabled to:

- count, read, write and order whole numbers, initially to 10, progressing to at least 1,000;
- understand the empty set and the conservation of number;
- understand that the place of the digit indicates its value;
- make a sensible estimate of a small number of objects and begin to approximate to the nearest 10 or 100;
- recognise and use simple everyday fractions.

Patterns, Relationships and Sequences in Number

Pupils should be enabled to:

- copy, continue and devise repeating patterns;
- explore patterns in number tables;
- understand the commutative property of addition and the relationship between addition and subtraction;

- understand the use of a symbol to stand for an unknown number;
- understand and use simple function machines.

Operations and their Applications

Pupils should be enabled to:

- understand the operations of addition, subtraction, multiplication and division (without remainders) and use them to solve problems;
- know addition and subtraction facts to 20 and the majority of multiplication facts up to 10×10 ;
- develop strategies for adding and subtracting mentally up to the addition of two two-digit numbers within 100.

Money

Pupils should be enabled to:

- recognise coins and use them in simple contexts;
- add and subtract money up to £10, use the conventional way of recording money, and use these skills to solve problems;
- talk about the value of money and ways in which it could be spent, saved and kept safe;
- talk about what money is and alternatives for paying;
- decide how to spend money.

MEASURES

Pupils should be enabled to:

- understand and use the language associated with length, 'weight', capacity, area and time;
- use non-standard units to measure and recognise the need for standard units;
- know and use the most commonly used units to measure in purposeful contexts;
- make estimates using arbitrary and standard units;
- choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy;
- sequence everyday events; know the days of the week, months of the year and seasons; explore calendar patterns;
- recognise times on the analogue clock and digital displays;
- understand the conservation of measures.

SHAPE AND SPACE

Exploration of Shape

Pupils should be enabled to:

- sort 2-D and 3-D shapes in different ways;
- make constructions, pictures and patterns using 2-D and 3-D shapes;
- name and describe 2-D and 3-D shapes; recognise reflective symmetry;
- explore simple tessellation through practical activities.

Position, Movement and Direction

Pupils should be enabled to:

- use prepositions to state position;
- understand angle as a measure of turn; understand and give instructions for turning through right angles;
- recognise right-angled corners in 2-D and 3-D shapes;
- know the four points of the compass;
- use programmable devices to explore movement and direction.

HANDLING DATA

Collecting, Representing and Interpreting Data

Pupils should be enabled to:

- sort and classify objects for one or two criteria and represent results using Venn, Carroll and Tree diagrams;
- collect data, record and present it using real objects, drawings, tables, mapping diagrams, simple graphs and ICT software;
- discuss and interpret the data;
- extract information from a range of charts, diagrams and tables;
- enter and access information using a database.