



Mathematics

Abacus

In order to help our pupils' progress in maths, we use Abacus – which is a toolkit, written for the new primary maths curriculum. To help children practice their maths, Abacus provides a fun and interactive way for children to learn. There are games and activities which will be allocated to the pupils for their homework, which will then be discussed back in the classroom. As well as this, the children can view pupil videos, which recap key teaching topics.

The site they will need to go to is:

<https://www.activelearnprimary.co.uk>

Instructions for pupils to access Abacus

The Abacus pupil world is powered by a website called ActiveLearn. To log into the pupil world, your child will need to:

- 1) Go to <https://www.activelearnprimary.co.uk>
- 2) Enter their login details and click “Log in”.
- 3) Once your child has logged in, they'll arrive at the Pupil Home. Children can personalise their home screen by choosing a world. The worlds differ depending on key stage but include: Race World, Skate World and Future World.

My Stuff

This is where children can see the activities their teacher has allocated to them.

My Rewards

This is where your child can go to select their rewards after completing allocated games and activities. They can also customise avatars, decorate a tree house, play games and more. The more games and activities your child completes, the more rewards they can unlock and buy.

Need help? Don't forget, if your child is having trouble using the pupil world, help can be found in the Help Section of ActiveLearn (in the top right-hand corner of the website).

Key concepts of mathematics:

Key Stage 1

The principal focus of mathematics teaching in Key Stage 1 is to ensure that children develop confidence and mental fluency with whole numbers, counting and place value.

Children will have the opportunity to work with:

- numerals and words
- all four operations (addition, subtraction, multiplication and division)
- practical resources (e.g. concrete objects/measuring tools)
- recognising, describing, drawing, comparing and sorting different shapes
- a range of measures to describe and compare different quantities, such as length, mass, capacity, time and money.

By the end of Year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. They should also be able to read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Lower Key Stage 2: Years 3 & 4

The principal focus of mathematics teaching in lower Key Stage 2 is to ensure that children become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value.

Children will:

- develop efficient written methods for all four operations (+ - \times \div)
- perform calculations accurately with increasingly large whole numbers
- begin to develop their ability to solve a range of problems, including with simple fractions and decimal place value
- draw with increasing accuracy and develop mathematical reasoning, so they can analyse shapes and their properties – confidently describing the relationships between them
- use measuring instruments with accuracy
- start to make connections between measure and number

By the end of Year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table. They should also be able to read and spell mathematical vocabulary correctly and confidently, using their growing word-reading knowledge and their knowledge of spelling.

Upper Key Stage 2: Years 5 & 6

The principal focus of mathematics teaching in upper Key Stage 2 is to ensure that children extend their understanding of the number system and place value to include larger integers. This should develop the connections that children make between multiplication and division with fractions, decimals, percentages and ratio.

Children will:

- develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic
- answer problems demanding efficient written and mental methods of all four operations
- work with fractions, decimals and percentages, as well as large whole numbers
- be introduced to the language of algebra as a means for solving a variety of problems
- be able to classify shapes with increasingly complex geometric properties.

By the end of Year 6, pupils should be fluent in written methods for all four operations, including long multiplication and long division. They should also be fluent in working with fractions, decimals and percentages, as well as large whole numbers. Pupils should spell and pronounce mathematical vocabulary correctly and confidently.

Parental support

Parental support with everyday maths is a very important part of developing a child confidence in maths. Please use the Maths Family Toolkit to support you working together with your child. It also has links to a number of useful websites.

<http://www.familymathstoolkit.org.uk/>