Kapow Primary™

An Overview of the Computing Primary Curriculum

KS1 Computing

Pupils should be taught to:

- Understand what algorithms are and how they are implemented as programs on digital devices.

- Create and debug simple programs.

- Use logical reasoning to predict the behaviour of simple programs.

This can be done through:

- programming BeeBots.
- taking part in unplugged computing activities.
- using cameras and photographic equipment.
- programming using Scratch Jnr.

KS1 Computing

Pupils should be taught to:

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

This can be done through:

- ➢ Using photographic equipment.
- ➢ Writing and debugging instructions.
- ➢ Organising data.
- ➢ Word processing.
- ➢ Programming Scratch Jnr.

KS1 Computing

Pupils should be taught to:

- Recognise common uses of information technology beyond school.

This can be done through:

- ➢ Using stop motion/editing software.
- ➢ Learning about technology in general.
- ➢ Finding out about the component parts of a computer.

KS1 Computing

Pupils should be taught to:

- Use technology safely and respectfully, keeping personal information private.

- Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

This can be done through:

- ➢ Learning more about internet safety.
- ➢ Finding out how to look for trusted sources of information online.

KS2 Computing

Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

This can be done through:

- ➢ Finding out how computers work.
- ➢ Learning about computer programming.
- ➢ Investigating HTML and computational thinking.
- ➢ Using BBC micro:bit.
- ➢ Creating music using Sonic:Pi.
- ➢ Using the programming languages of Logo and Python.

KS2 Computing

Pupils should be taught to:

- Understand computer networks including the internet, how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

This can be done through:

- ➢ Understanding how computer networks operate.
- ➢ Taking a journey inside a computer.
- ➢ Learning how to use emails.
- ➢ Finding out about the internet and how it works.
- ➢ Learning about search engines and the Mars Rover.
- ➢ Finding out how organisations use and store data.
- ➢ Learning about early computing at Bletchley Park.

KS2 Computing

Pupils should be taught to:

- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

This can be done through:

- Finding out about website design.
- Learning about online safety.
- Looking at Sonic:Pi and Mars Rover.
- Learning about Bletchley Park and early computing.
- Investigating weather and data.

KS2 Computing

Pupils should be taught to:

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

This can be done through:

- ➢ Finding out how to use email responsibly.
- ➢ Designing a website.
- ➢ Learning about online safety and how to use search engines safely.