Computing Policy

Overview

We will provide a high-quality computing education that equips pupils to use computational thinking and creativity to communicate ideas and create digital content. Cross-curricular links will be made with core and foundation subjects to provide a broad and balanced computing education with a structured, progressive approach to the learning of how computer systems work. Children will be taught the skills necessary to become digitally literate and participate fully in the modern world.

Objectives

By the end of key stage 1 pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programmes.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs. 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.
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Strategies

- The core requirements of the Key Stage 1 and Key Stage 2 Computing programmes of study, such as coding and programming, will be delivered through a scheme of work.
- Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning computing and using their knowledge, skills and understanding of computing across the curriculum.
- Children will also access regular E-Safety lessons which will focus on staying safe online in school and at home.
- The computing coordinators will assess and address staff training needs as part of the ongoing action plan process or in response to individual needs and requests throughout the year.
- The computing coordinators will monitor the quality of computing teaching and learning and scrutinize plans to ensure full coverage of the Computing curriculum requirements.
- Weekly support from a specialist IT technician is in place for any hardware/software issues.
- Computing coordinators will follow the actions and timescales on their specified action plan in order to continually address issues and develop the subject of computing at Woodland Community Primary School.

Outcomes

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the computing programme of study. Pupils will know how to use technology safely and respectfully, keeping personal information private.

Adopted by the Governing Body ……..Date……July 2017……..Review Date……July 2019……