

Regis Manor Primary School Computing Curriculum Overview

At Regis Manor Primary School we teach computing using a range of unplugged (not using a computer) and plugged in (using a computer) lessons supported by Barefoot Computing helping to inspire pupils to think, learn and thrive in a digital world. The table below outlines the skills to be learned, software to be used and links to the national curriculum throughout each term. Teachers use this outline, alongside the skills progression document to create medium term plans.

Barefoot Computing

Created by a team of practising primary teachers, Barefoot's high quality, cross-curricular activities help bring computational thinking concepts and approaches alive in engaging and practical ways. There are clear definitions, examples and progression across all primary school age and ability ranges, all designed to help deepen understanding of computational thinking and computer science topics.

The project uses a range of approaches to a core set of computational thinking principles including:

- *Logic
- *Algorithms
- *Decomposition
- *Patterns
- *Abstraction
- *Evaluation

What is an unplugged activity?

Unplugged activities aid the teaching and learning of computer science through engaging tasks, games and puzzles. The activities introduce students to many of the underlying concepts separated from the distractions and technical details we usually see with computers.

Details of the skills progression for each year group can be found [here](#):

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
KS1	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.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school	Use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school	Use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school	Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs
LKS2	Use technology safely,	Select, use and combine	Understand computer	Design, write and debug	Use search	Select, use and

	respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact.	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	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	programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	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
UKS2	Use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact.	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 Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	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	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	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 Use sequence, selection, and repetition in programs; work with variables and various forms of input and output