



Selby Abbey C.E. (VC) Primary School

Computing Curriculum 2017 - 2018



Essential Objectives

- To code – Programming
- To connect – E-safety and understanding of computer networks.
- To collect – Data handling
- To communicate – Research and presentation.

Essential Characteristics of Effective Coders and Users of Technology

- Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
- The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity.
- An understanding of the connected nature of devices.
- The ability to communicate ideas well by using applications and devices throughout the curriculum.
- The ability to collect, organise and manipulate data effectively.

KS1

Year 1

To code

- Understand that an algorithm is a set of instructions.
- Create a simple algorithm to be performed on screen.
- Predict the what the outcome of the algorithm will be.
- Recognise common uses of information technology beyond school.

To connect

- To use technology safely for particular purposes
- Know where to go for help and support when they have concerns about content or contact on the internet or other online material.
- Use a range of programs and ways to connect with others.

To communicate

- Use technology purposefully across the curriculum to communicate ideas.

To collect

- To collect and organise information (data) to answer specific questions.

Year 2

To code

- Understand what algorithms are, how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Recognise common uses of information technology beyond school.

To connect

- Use technology safely and respectfully, keeping personal information private.
- Know where to go for help and support when they have concerns about content or contact on the internet or other online material.
- Use a range of programs and ways to connect with others using technology including blogging.

To communicate

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

To collect

- Store and retrieve data and know how some data can be represented digitally to answer specific questions.

LKS2

Year 3

To code

- Design programs that accomplish specific goals, including by decomposing them into smaller parts.
- Use sequence and selection 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.

To connect

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns and inappropriate behaviour.
- Use a range of programs and ways to connect with others using technology including blogging.

To communicate

- Select, use and combine a variety of software (including internet services) on a range of digital devices to communicate ideas including presentation.

To collect

- 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 and using the data for a purpose or to solve a problem.

Year 4

To code

- Design, write and debug programs that accomplish specific goals, including 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

To connect

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns and inappropriate behaviour.
- Use a range of programs and ways to connect with others using technology including blogging and email.

To communicate

- 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 and content that communicate ideas clearly to a specific audience.

To collect

- 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 in order to answer specific questions posed by pupils.

UKS2

Year 5

To code

- Debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selections 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.

To connect

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns and inappropriate behaviour.
- Use a range of programs and ways to connect with others using technology including blogging and collaborative work online.

To communicate

- 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, system and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

To collect

- 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.

Year 6

To code

- 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, selections 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.

To connect

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns and inappropriate behaviour.
- Use a range of programs and ways to connect with others using technology including blogging and collaborative work online.

To communicate

- 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, system and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

To collect

- 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.