



Knowledge and Skills – Subject Overview

Subject: Computing Key Stage: 1		
AREAS	KNOWLEDGE	SKILLS
Digital Literacy	<ul style="list-style-type: none"> Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. To know the hardware parts of computer – monitor, laptop, mouse, keyboard, left click, right click, USB, floppy disk, CD. Understand the history of portable storage – floppy disk-CD-USB. To know that the World Wide Web and internet help us to communicate. To know that caps lock can be used when writing words and sentences in capitals. Understand what a passcode is, why we use them and how to use a passcode safely. Understand what personal information is. Understand what acceptable content is. Know that changes to writing happen through software rather than hardware. Know that you can make changes to text by selecting and executing a change (font size, bold and underline). Understand simple functions of the keyboard. 	<ul style="list-style-type: none"> Use technology safely and respectfully, keeping personal information private. Use a 'qwerty' keyboard (letters and punctuation). Use a mouse (inc. left and right click, scroll and move). Be able to login using a username and password/passcode. Be able to use the shift button instead of caps lock. Use SMART principle to help remember the aspects of online safety (see Appendix 1). Know what to do when unacceptable content appears. Know how to log out of a computer. Know that the keyboard is in capital letters. Know how to use font size. Know how to use underline and bold. Know how to log in to Google Classroom and join Google Meet. Be able to retrieve and upload work to/from Google Classroom. Be able to access and use the Chat function in GC appropriately. Be able to retrieve and upload work to Google Classroom.

Computer Science	<ul style="list-style-type: none"> • Understand what algorithms are – understand algorithms are instructions. • Understand how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions (algorithms). 	<ul style="list-style-type: none"> • Use a beebot. • Give instructions (guide someone around the room/write a set of instructions). • Create and debug simple programs. • Use logical reasoning to predict the behaviour of simple programs.
Information Technology	<ul style="list-style-type: none"> • Recognise common uses of information technology within and beyond school. • To know and understand the difference between a search engine and a website. 	<ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate and retrieve digital content (using a range of devices – desktop, iPad, IWB). • Save, retrieve and print work.

Subject: Computing Key Stage: 2		
AREAS	KNOWLEDGE	SKILLS
Digital Literacy	<ul style="list-style-type: none"> Identify a range of ways to report concerns about content and contact. Know the different methods of communication within the World Wide Web. Extend knowledge of the keyboard (function keys, shift for punctuation, tab, windows etc.). 	<ul style="list-style-type: none"> Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable behaviour. Know SMART principle to help remember the aspects of online safety (see Appendix 1). Use number lock for typing lists of numbers or calculations. Use a trackpad on a laptop.
Computer Science	<ul style="list-style-type: none"> 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. To know what an input is and how to work with various forms of them. To know the difference between the World Wide Web and internet. 	<ul style="list-style-type: none"> 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.
Information Technology	<ul style="list-style-type: none"> Know the different locations for shared drives. Know that cloud saving (google drive) can be accessed from any device. 	<ul style="list-style-type: none"> Be discerning in evaluating digital content. Use search technologies effectively. Use search technologies effectively, appreciate how results are selected and ranked. 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. Be able to save documents in different locations.

Appendix 1

How should we act on the internet?

Be Smart!

S

Be Safe

Keep your personal information safe and secure.



M

Do Not Meet Up

Do not agree to meet anyone from the Internet. They may not be who you think they are.



A

Do Not Accept

Do not accept messages or emails from somebody that you don't know. If you receive messages that make you feel uncomfortable, tell an adult that you trust and delete them.



R

Reliable?

Do not always trust information that you find on the internet. It may not always be correct.



T

Tell Someone

If something or someone upsets you on the Internet, tell a trusted adult in school or at home.



Who is responsible for E-Safety in our school?

- Mrs Slater
- Miss Grimshaw
- All teachers and adults

