Trewidland Computing
Progression of Skills

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Information Technology	Use digital technology to store and retrieve content e.g. e- books, templates and previous learning. Create original content using digital technology in the form of images, video and audio.	Store, organize and retrieve digital content for a given purpose e.g. reviewing and rejecting photographs. Create and edit original content for a given purpose e.g. create and edit a pictogram.	Use a range of programs on a computer e.g. Movie Maker, Google Forms. Design and create content using a range of software with some degree of independence. Collect and present information in digital form. Search for information within a single website.	Use and combine a range of programs on a computer e.g. combining text editor and web programs. Design and create content on a digital device in response to a given goal. Collect and present data in digital forms. Use a standard search engine to find information and support learning. Understand that search engines rank pages according to relevance.	Use and combine a range of programs on multiple devices e.g. combining local media with web-based applications. Design and create programs in response to a given goal. Analyse and evaluate digital information. Make more effective use of a search engine by filtering results according to the purpose. Understand that search engines use a cached copy of the crawled web to select and rank results.	Select, use and combine a range of programs on multiple devices. Design and create systems in response to a given goal. Analyse and evaluate digital data. Use a range of search engines appropriate to finding information that is required for a task or learning goal. Appreciate that search engines rank pages based on the number and quality of in-bound links.

Progression of Skills

Digital Literacy						
	Use technology safely and respectfully by keeping safe while using digital technology.

Understand that information on the internet can be seen by others.

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

Show an awareness of how ICT is used for communication beyond the school setting. | Use technology safely and respectfully by keeping safe and respecting others while using digital technology.

Understand that they should not share personal data online.

Understand actions they can take if they have concerns about online content or communication.

Show an awareness of how ICT is used for a range of purposes beyond the school setting. | Use digital technology safely and show respect for others while working online.

Recognise unacceptable behaviour while using digital technology.

Know who to talk to about concerns and inappropriate behaviour that happens in school.

Decide whether a web page is relevant for a given purpose. | Demonstrate that they can act responsibly and respectfully when using computers.

Understand the difference between acceptable and unacceptable behaviours when using digital technology.

Know who to talk to about concerns and inappropriate behaviour at home and at school.

Decide whether digital content is reliable and unbiased.

Work collaboratively with peers on an audio file. | Demonstrate they can act responsibly and respectfully when using the internet.

Understand the importance of secure connections.

Discuss the consequences of behaviours when using digital technology.

Know how to report concerns and inappropriate behaviours in a range of contexts.

Decide whether digital content is relevant to a task.

Work collaboratively with peers on a class blog. | Explain their own actions and consequences while using digital technology.

Identify principles underpinning acceptable use of digital technologies.

Know a range of ways to report concerns and inappropriate behaviour in a variety of contexts.

Form a personal opinion about the effectiveness of digital content.

Use online tools to plan and carry out a collaborative project. |

Progression of Skills

Computer Science	Create and debug simple programs e.g. programming a BeeBot. Use logical reasoning to predict the behaviour of simple programs by giving explanations for what they think a program or algorithm will do.	Understand that algorithms are sequences of instructions or sets of rules. Program a simple set of instructions on screen to implement an algorithm. Create a simple program on screen and correct any errors. Give logical explanations for how they expect their programs to run.	Design and write a program using a block language without user interaction. Use a sequence in programs using blocks. Write a program in order to produce an output on screen. Explore simulations of physical systems on screen. Plan a digital project e.g. plan an animation project or digital survey. Explain a simple, sequence-based algorithm in their own words. Understand that computer networks transmit	Design and write a program using block language to a simple brief, including simple interaction. Use sequences and repetition within their programs. Develop their own simulation of a simple physical system. Write a write that accepts keyboard input and produces on-screen output. Work with others to plan and execute a project. Explain an algorithm that utilizes sequences and repetition in their own words.	Design, write and debug a program using block language based on their own ideas. Experiment with computer control applications e.g. MaKey MaKey. Plan a solution to a problem by decomposing the problem and working through the individual elements. Use sequences, repetition and selection in block programs. Write a program that accepts both keyboard and mouse input and produces a visual and audio output.	Design, write and debug a program using a second programming language. Design, write and debug their own computer control application. Solve problems using decomposition and tackling each part separately. Use sequences, repetition, selection and variables in programs. Write a program which accepts inputs other than keyboard and mouse. Write a program which produces outputs other than

			information in a digital format e.g. binary Understand that email and video calls are sent using the internet.	Use logical reasoning to detect and correct errors when programming. Understand that the internet transmits data as packets of data. Understand how the internet makes the web possible.	Explain a rule based algorithm in their own words. Use logical reasoning to detect errors in algorithms. Understand how data routing works on the internet. Understand how web pages are created and transmitted.	audio and visual e.g. motors. Give clear and precise logical explanations of a number of algorithms. Use logical reasoning to detect and correct errors in algorithms and programs. Understand how mobile phone and other networks operate. Understand how domain names are converted into IP addresses on the internet.