ACET Junior Academies

Computing – KS1 and KS2 Vocabulary

Computing Concepts:

Algorithm An algorithm is a sequence of instructions, or set of rules, that we can follow to solve a problem or achieve a task. Examples of algorithms in everyday life include recipes, furniture instructions and even songs such as the Hokey Cokey that instruct us how to dance a particular dance! They can take the form of written instructions, a flowchart or even a series of diagrams.	**Debug** Debugging is the process of finding an error in an algorithm (commonly known as a 'bug') and removing the error.	**Decomposition** Decomposition is the process of breaking problems down into smaller sub problems to make a problem easier to solve. It involves breaking down a complex problem or system into smaller parts that are more manageable and easier to understand.
Input An input is the data a computer receives and can take a variety of forms, from commands you enter from the keyboard, to data from another computer or device. A device that feeds data into a computer, such as a keyboard or mouse, is called an input device. Other input devices include scanners, cameras, microphones and joysticks	**Logical Reasoning** Logical reasoning the process of thinking through a problem or the steps of an algorithm using rules to explain the outcome. It is about being able to explain why something is the way it is. It is also a way to work out why something isn't quite as it should be.	**Output** An output is the data or information generated by the computer, which is transferred to the user via a screen, speakers, a printer etc. Common output formats are printed paper, sound, video and onscreen documents. They let the computer communicate with the user.
Program A program is a stored algorithm written in a specific language (programming language) to achieve a specific task. It tells a computer what to do.	**Repetition** Repetition is a concept in programming when parts, or even the whole, of an algorithm are repeated either a fixed number of times or forever.	**Selection** Selection is a concept in programming when parts, or even the whole, of an algorithm is activated only when a certain condition occurs. An example in real life could be: When it rains, then I'll get my umbrella.
Sequence Sequence is a concept in programming whereby steps within an algorithm are placed in order and the order is important, such as when writing a recipe: We need to create a cake mix before the cake goes in the oven.	**Variables** Variables are programming tools whereby computers can store information which can then change as the program runs. Variables could be used to store the score in a game (which then changes as the game plays out), the number of cars in a car park or the cost of items on a till. They work in a similar way to algebra, where a letter in your code can stand for a number.	**Network** A network is two or more computers (or other electronic devices) that are connected together, usually by cables or Wi-Fi.