Computing

Vocabulary Progression Document (EYFS – Y6)

This document is designed to assist with the teaching of vocabulary in Computing across EYFS, KS1 and KS2. The words have been arranged into the topics so teachers can quickly identify the key words they will need when planning each unit.

The words highlighted in yellow signify vocabulary that has been taught previously and is being revisiting to secure children's understanding. It may also be that this term is used in a slightly different context. It should also be noted that some of these words are likely to be introduced to the pupils in other contexts prior to this and is therefore, it will be down to the teacher's discretion which words need explicit teaching for each unit.

This document is not designed to limit the teaching of vocabulary to younger children. If a child asks about a Computing concept that requires the use of vocabulary from a higher year group, then the correct vocabulary should be used. Similarly, this list is not necessarily comprehensive. Additional Computing vocabulary may need to be used alongside those provided below.

Vocabulary should be taught explicitly (at the beginning of the unit or during the lesson starter and should be revisited, referred to during lessons, encouraged in children's verbal responses as well as forming part of problems or challenges that they access to embed it in their long-term memory.

	Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
EYFS	Children will have the opportunity to explore the following terms: Internet; website; equipment; buttons; on/off; screen; mouse; device; paint; image;' keyboard; technology; safe; create; share; press; iPad; button, switch. Bee-Bot; app					
Year One	delete enter password touchpad type username	algorithm Bee-Bot control instruction precise program	digital fill font Microsoft Paint tool touchpad	algorithm command debug error instruction test	algorithm debug Fake-bot sequence symbol trial and error	E-safety offline online personal information SMART Kiddle
Year Two	algorithm debug efficient evaluate program purpose	copy insert internet report search engine SMART	folder load media PowerPoint slide text box	cell column data Excel insert row	backdrop block code event script sprite	cyberbullying digital footprint internet password username website
Year Three	code input import output sequence sprite	block debug make-Test-Fix program script trial and error	copyright network rank search engine webpage World Wide Web	communication cyberbullying digital footprint email emoticons software	Boolean branching database database search engine software Tinkercad	insert multimedia presentation snipping tool tools word-string
Year Four	block if/else repetition script sprite variable	animation frame software stop-frame stop-motion storyboard	chart data Excel hyperlink presentation transition	audio communication footage frame panning zooming	code component decomposition selection value variable	crop format layer publishing software transparency tool
Year Five	debug flowchart repetition sequence selection variable	animation broadcast debug input output sequence	analyse data formula infographic software spreadsheet	audio Creative Commons frame function montage panning	copyright fair use intellectual property piracy plagiarism SMART	efficient function loop procedure repetition text-programming
Year Six						

Glossary – What do some of the unfamiliar terms mean?

Key term	Definition
algorithm	- A set of instructions for solving a problem (usually related to a computer).
animation	- Combining lots of still images (frames) to create a digital display that moves.
Bee-Bot	- Physical Computing: A mini 'robot' designed to look like a bee that can be programmed to follow simple algorithms.
block	- A single piece of code (usually split into commands, events, controls and variables).
code	- A set of instructions written or produced in computer language.
command	- A single given instruction to a computer (linked to input).
communication	- Digitally transferring data from one place to another. E.g. creating a bar chart on Excel and saving it/using it within a PowerPoint presentation.
component	- Linked to 'hardware', a component refers to one of the core things a computer needs to function. For example, a motherboard or hard drive.
copyright	- Owning the rights to something – someone cannot use or copy it and claim it is their own (linked to intellectual property and plagiarism).
cyberbullying	- Bullying that takes place over digital devise or some form of social media.
debug	- Identifying the problem within a code and correcting it or finding a possible solution.
decomposition	- Breaking down a complex problem into smaller, more manageable parts.
digital	- Electronic technology that generates, stores and/or processes data.
digital footprint	- Data left behind when users have been online, including websites you have visited, emails you have sent and other information you submit on varying webpages.
event	- An action that can be recognized by a computer – it happens after a deliberate action – like the click of a mouse on the green flag within Scratch – occurs.
fair use	- Allowing some copyright materials to be used for special purposes like research.
frame	- A single, still image displayed by a digital device.
hyperlink	- A reference to another piece of data that can be quickly accessed with one click.
infographic	- Data represented in a table, chart or graph for easier, visual viewing.
input	- Information sent to a computer for processing.
intellectual property	- A computer code or program that is protected by law against the copying, theft, or other use that is not permitted by the owner.
loop	- A piece of coding/a script that repeats itself.
multimedia	- Using more than one piece of media (audio, text, video, images, animations etc.) in the same program.
output	- Any information a computer has processed that you can see or hear, for example music from speakers or text on the screen).
panning	- Moving a camera horizontally as part of filming angles.
piracy	- Copying or sharing information/software that you do not have the rights to (linked to copyright and plagiarism).
plagiarism	- Copying ideas or words and claiming that they are your own.
program	- A series of coded software instructions to control a computer or digital device.
repetition	- Repeating a particular block or script for a purpose (similar to loop).
script	- A set of blocks put together to create a simple piece of coding.
search engine	- A software program designed to carry out web searches.
selection	- A section of code that only works when a question or decision has been met/made.
sequence	- Using a logical structure to create an algorithm/piece of coding.

SMART (acronym)	- Safe; Meeting (dangers); Accepting; Reliable; Tell – linked to E-safety.
software	- Programs and other stores information that tell a computer how to work (opposite of hardware).
sprite	- A computer graphic, like a character in Scratch, that is used within a program.
stop-motion	- An animated filming technique that used physical objects instead of digital images or illustrations (for example: Wallace and Gromit).
text-programming	- Creating a code using letter and words, instead of blocks like the children use on Scratch.
tool	- Components and accessories used within a piece of software, for example 'home/insert/design' on Word.
variable	- Data values that can be changed depending on what is being inputted into a program – a score for example.
webpage	- A single document on the web using a unique URL and normally made using HTML.
website	- A combination of webpages where linked information is stored/grouped together.
zooming	- Using the magnification tool to bring a graphic closer or send it further away.

Common Misconceptions:

code vs algorithm:

- An algorithm is a typically written down or created using images/flowchart where as a coding refers to a series of steps that a machine or device can execute.

website vs webpage:

- A webpage is one single document online where as a website is a combination of webpages that have been grouped together as information is linked/shared.

block vs script:

- In programming, a block is one single piece of coding but a script is where thee blocks have been combined too help produce a piece of coding.

piracy vs plagiarism:

- Piracy is illegally using software/programs and/or sharing them without permission; plagiarism is the same but for words or ideas.

loop vs repetition:

- Very similar: repetition is to keep on running lines of code X number of times. A loop is very similar however it will only repeat until a condition is met.