



Year Group	Key Vocabulary: This is a guide to key computing vocabulary for year groups or Key Stage.
<b>Foundation</b>	Instructions, camera, robot, QR code, sequence, share, technology, control, Google, information, internet, algorithm, computer, iPad/tablet, app (application), keyboard, button, printer, save, zoom.
<b>Year 1</b>	3D, program, debug, design, emoji, search, selection, website, personal information, link, menu, icon, trusted adult, online, sign in, game, wireless (Wifi), online bullying, landscape, portrait, Bluetooth, download, frame, processor, green screen, hard drive, illustration, log in, tool, send, follow, digital, communicate.
<b>Year 2</b>	Browser, computer networks, data, computational thinking, execute/run, input, output, software, World Wide Web (WWW), password, username, interact, images, facts, scan, chat, post / re-post, copyright, backdrop, repeat / loop, characters, avatars, fictitious/fake, evaluation, publish, trust, stroke, template, reputation, identity, digital book (eBook/ePub).
<b>Year 3</b>	Block, palette, code/coding, command, decomposition, sprite, stage, condition, control block, costume, digital content, simulation, hyperlink, attachment, URL, blog/blogging, consequences, illustrator, untrusted, cyberbully, cyberbullying, reliable, MegaByte, GigaByte, report, sceptical, verify, fake news, soundtrack, VR (virtual reality), font, shortcut, shots, 360° Video, authenticate, multimedia.
<b>Year 4</b>	Logical reasoning, audio, selection, page ranking, hacker, repetition (sometimes referred to as 'iteration' in upper KS2), script, scripts area, secure (https), PEGI, netiquette, conditional, scene, filters, grieving, storyboard, cloud computing, positive online communication, online persona, digital footprint, animation, age restrictions, social network, screenshot, screencast.
<b>Year 5</b>	Abstraction, vlog, YouTuber, IP address, pixels, vector, HTML, CSS, services, ISP, LAN, TCP/IP, variables, hub, peripheral, bandwidth, CEOP, ChildLine, cache, harassment, plagiarism, infringe copyright, illegal downloads, streaming, blocking, victim, cookie, junk mail, RAM / ROM, USB, ZIP, augmented reality, bit & bytes, upload, score, podcast, edit.
<b>Year 6</b>	Antivirus, new media, collaboration, visual coding, text based coding, adware, trojan, feedback, bot, boolean, checksum, server, firewall, generalisation, security updates, plug in, pop up blocker, scams, phishing, location based settings, in app purchasing, trolling, sexting, exclusion, doxxing, catfishing, flaming, fabotage, creeping, dissing, ghosting FTP, filtering, malware, screen time, balanced lifestyle, configuring.



# A

**Abstraction**

Taking the detail out of a 'problem' to make it easier to solve.

**Adware**

Software application which displays adverts and can redirect searches.

**Algorithm**

Steps to follow to achieve a task.

**Application (App)**

A program (such as a word processor or a spreadsheet) that performs one of the important tasks for which a computer is used

# B

**Bandwidth**

The amount of data that can fit through an Internet connection.

**Block**

An instruction in Scratch. Blocks linked together are called a script or program in Scratch. Also to block someone from contacting a user on a social media account for example.

**Blog/Blogging**

Short for 'web log', a shared online journal or diary. Normally a webpage containing users' opinions/experiences/observations.

**Bluetooth**

Allows the exchange of data over short distances from devices.

**Boolean**

A variable whose value can only be true or false.

**Bot**

A program that can do things without a user needing to give instructions. Many bots are malware.

**Browser**

A computer program used to access the World Wide Web.

# C

**Canvas**

A region on which you can draw lines, shapes or text.

**Catfishing**

This is where someone steals your photos and uses them as their own, usually in a bid to meet other people on the internet or to trick or fool someone.

**CEOP**

Child Exploitation and Online Protection Command is tasked to bring offenders to UK Courts.

**Checksum**

The total number of packets sent to/from a router.

**Circumventor Sites**

Parallel websites that allow children to bypass sites their adults have blocked.

**Cloud computing**

A system in which data is stored on a central server owned by a company (e.g. Google) and accessed virtually.

**Code**

Lines or blocks of instructions (see program).

**Computer**

A device that takes input, processes it, then produces output.

**Computer networks**

Connected devices that make it possible to transfer data using an agreed method ('protocol').

**Costume**

In Scratch, the costume is what a sprite can look like on screen.

**Command**

A step or line of programming (instruction for younger children).

**Computational Thinking**

An analytical approach to 'problem' solving (involving abstraction, decomposition, logical thinking, pattern, evaluation, generalisation)

**Condition**

Something that is either true or false

**Cookie**

A small file which records a user's personal preferences, shopping choices and other information.

**Copyright**

Gives the creator of an original work ownership rights.

**Creeping**

Someone who follows someone else's social network profile closely.

**Cyberbullying**

The use of electronic communication to bully someone.



## D

### Data

Numbers that represent images, video, text and sound.

### Debug

Finding and correcting errors.

### Decomposition

Splitting things into smaller parts.

### Decoy App

These apps help children hide videos/images from their parents.

### Digital Footprint

A person's trail of data on the internet that can last indefinitely.

### Digital content

Any media created, edited or viewed on a computer.

### Dissing

The act of commenting on a status with single liners that insult a specific person.

### Download

Transfer of a file, from a central computer to your computer.

### Doxxing

The publishing of an individual's home address or bank details etc.

## E

### Ebook / ePub

Digital book format file.

### Emoticon / Emoji

The use of icons or text to portray mood or facial expression, e.g. :) when happy and :( when sad.

### Etiquette

A set of rules that people try to abide by out of respect for other people around them.

### Evaluation

Is this 'good'? Can it be improved?

### Exclusion

This occurs when an individual is passively ignored or actively rejected by others, and can occur face-to-face (offline) or via the Internet (online).

### Execute

Run or follow a series of instructions in a program.

## F

### Fabotage

Accessing someone else's social media account without their knowledge and changing information on it.

### File format

The particular code that a file is stored in. Different software and devices use different formats, e.g. video uses MP4 and audio use Mp3.

### Firewall

A system designed to prevent unauthorised access to your computer when connected to a network such as the Internet.

### Flaming

Flaming is the act of posting or sending offensive messages over the Internet. These messages, called "flames," may be posted within online discussion forums, or sent via instant messaging programs.

### Fraping

This is a combination of 'Facebook' and 'rape' and it is when someone has used your Facebook account without permission and destroyed comments or pictures, or created new and offensive comments and pictures pretending to be you.

### FTP

File Transfer Protocol. A service for moving files from one computer to another.



## G

### **Gamer**

A person who plays video games including online, likely with other online users.

### **Gamer Tag**

An alter ego made from an alias, picture or avatar. Sometimes these are offensive.

### **GB GigaByte**

1024 kilobytes. Unit of measuring data.

### **Generalisation**

Adapting solutions already found to solve new problems.

### **Geocaching**

Is an outdoor activity in which the participants use (GPS) to hide and seek containers, called “geocaches”.

### **Geotag**

To attach the exact geographical coordinates of longitude and latitude to a digital image, giving the location of where it was taken.

### **Ghosting**

This means breaking off a relationship by stopping all communication and contact without any apparent warning or justification.

### **Griefer**

Someone who deliberately harasses online gamers during a gaming session.

### **Grooming**

Someone who gains a child’s trust for sexual exploitation or trafficking.

## H

### **Hacker**

A person who uses technology to gain unauthorised access to information.

### **Harassment**

This is the act of sending continuously offensive, rude and insulting messages.

### **Hardware**

The physical parts of a computer system, e.g. the CPU and the devices connected to it.

### **HDMI (high-definition multimedia interface)**

Required for connecting devices to show high-definition video.

### **HTML**

Hyper Text Markup Language: the ‘code’ used to create and lay out web pages.

### **Hub**

A device that joins a group of computers together.

## I

### **Identity theft**

A crime that involves someone pretending to be another person in order to steal money or obtain other benefits.

### **In-app purchasing**

Purchases of services or products are possible within some apps, such as game apps, and real money is required by them.

### **Incognito browsing**

This allows a user to browse the web without their history being recorded on their device.

### **Information**

Data processed and/or presented to users in a meaningful way.

### **Input**

A method of computers receiving data (Eg. keyboard, mouse, touch, sensors etc.).

### **Instant Messenger**

A way of communicating where messages are sent over the internet in real time.

### **Internet**

The global collection of computer networks and their connections, all using shared protocols (TCP/IP) to communicate.

### **Internet Shaming**

Online shaming is a form of Internet vigilantism in which targets are publicly humiliated using technology like social and new media.

### **IM (DM / PM)**

Instant message also known as direct message, Private or personal message. These are messages sent between users via the internet or social media apps. These are very popular with younger generations.

### **IP Address**

Numerical label assigned to each device on a computer network.

### **ISP**

Internet Service Provider. The company you pay to connect you to the Internet.



## J

### Java

Programming language that enables the browser to perform a function or feature not normally available

### JavaScript

Programming language that allows a web designer to add extra features to their web page.

### JPEG

A format for compressing image files.

### Junk Mail

Unwelcome or unwanted emails also known as SPAM.

## K

### Kbps

Kilobits Per Second, primarily used to measure data transfer rates.

### Keyboard

A board of keys. One of the primary input devices used with a computer.

### Keyboard Shortcut

Key combination that performs a certain command, such as copy or paste.

### Keywords

Words or phrases that describe content.

### Kilobyte

Most often used to measure the size of small files.

## L

### LAN

Local Area Network. Computers connected together that are geographically close to each other (e.g. home or school).

### Link

Allows users to navigate. E.g. by clicking on a link, the user can 'jump' to a new screen.

### Logical reasoning/thinking

A systematic approach to solving problems or deducing information using a set of universally applicable and totally reliable rules.



## M

### Malware

Software that is designed to cause problems for users.

### Metadata

Provides information about the content of a digital item, e.g. each digital image from a digital camera has a file attached listing such things as date, time, camera and shutter speed.

### Multimedia

A combination of different content types such as text, audio, still images, animation and video.

## N

### Navigation

If a product is interactive, the user must be able to move around it easily. Navigational aids such as buttons and links are an important feature of interactive digital products.

### Navigation bar

Usually placed along the top or side of the screen, this consists of a series of links to other screens. The navigation bar appears in the same position on every screen of the product, making it easy for users to find their way around.

### Netiquette

Netiquette is the code of good behaviour on the internet. As the internet changes, so does netiquette.

### Network

A group of computers that are connected (including the Internet).

## O

### Outing

'Outing' people by publishing or disseminating confidential information online.

### Output

The information produced by a computer system for its user, typically on a screen, through speakers or on a printer, but possibly through the control of motors in physical systems. Also an action performed by the computer e.g. switching on a light, moving a turtle or sprite across the screen.



## P

### **Packet**

Small pieces of data.

### **PageRank**

A way of ordering the results of a search on the internet.

### **Pattern**

Finding and using repetition in programs.

### **Pharming**

Directing a user to a bogus website that pretends to be a real one in order to extract information from them.

### **Phishing**

A form of Internet fraud that aims to steal valuable information such as credit card details, usernames and passwords.

### **Photo Sharing**

Some apps allow users to share images for a few seconds. These apps can be very damaging to children.

### **Profile**

Often social media sites will allow users to create their own personal profiles which other users can see.

### **Program**

A sequence of instructions written to perform a specified task on the computer.

## Q

### **QR Code**

A QR code (short for "quick response" code) is a type of barcode that contains a matrix of dots. It can be scanned using a QR scanner or a smartphone with built-in camera.

### **QWERTY**

This term is used to describe a standard (Latin alphabet-based) keyboard.

## R

### **RAM / ROM**

Random access memory (RAM) is a form of computer data storage. Read-Only Memory - is a computer hard drive.

### **Repetition**

Instructions that can be repeated until a condition is met – i.e. a loop. Sometimes referred to as 'iteration'.

### **Resolution**

The number of distinct pixels in each dimension that can be displayed.

### **Roasting**

Girls are ganging up on boys in a new cyberbullying craze called "roasting". The new bullying takes place via mobile apps such as WhatsApp, Instagram or Facebook, where girls pick on a boy and vent the most offensive abuse until the victim "completely cracks".

### **Router**

A device which can be either wired or wireless and is used to connect devices to the internet.



## S

### **Search**

Finding data or information that satisfies condition(s). Such as web pages containing supplied keywords, or files on a computer with certain properties.

### **Selection**

A way in computer programs to make choices (e.g. IF..THEN)

### **Selfie**

Self-portrait photo often taken at arm's length using a Smartphone and uploaded to social media.

### **Sequence**

A set of instructions that are followed in order

### **Services**

Programs running on computers, typically those connected to the internet, for example, to transmit a web page, deliver an email or allow a text, voice or video conversation.

### **Sexting**

Sending and receiving sexually explicit images/videos via IM, text or social media.

### **Simulate**

Using computers to imitate real-world scenarios

### **Social networking**

An online community where people can communicate and share information.

### **Software**

Computer programs and applications (apps)

### **Spam**

Messages sent to large numbers of users for the purpose of phishing, spreading malware and advertising.

### **Sprite**

(in Scratch) an object that can be controlled by programming. Scratch projects are made up of objects called sprites.

### **Spyware**

Software that can be installed on your computer without your knowledge, which collects information and sends details to another computer on the Internet.

### **Stage**

This is where you see your stories, games, and animations come to life. Sprites move and interact with one another on the Stage.

## T

### **TB**

Terabyte or 1024 gigabytes.

### **TCP/IP**

Language computers use to communicate.

### **Trojan**

A program that appears legitimate but which performs some harmful activity when it is run. Trojans often sneak in attached to a free game.

### **Troll**

A user who posts inflammatory messages typically on Social Media sites to upset others.

## U

### **Upload**

Transfer a file from your computer to a central computer, e.g. your ISP.

### **URL**

Uniform Resource Locator: a nickname (address) for a website

### **USB (Universal Serial Bus)**

A standard method of connecting devices such as keyboards and printers to a computer.





## V

### Variables

A way in which computer programs can store, retrieve or change simple data, such as a score, the time left, or the user's name.

#### **Video Hosting Sites**

Websites and apps which allow users to post and view video clips, like YouTube.

#### **Virus**

A program designed to cause other programs on a computer to malfunction or stop working altogether.

#### **Vlog (Vlogger)**

Short for 'video log', a shared online journal or diary. Normally a video shared to YouTube or Vimeo containing users' opinions/experiences/ observations

## W

#### **Web Server**

A computer connected to the Internet that provides access to (hosts) websites.

#### **World Wide Web (WWW)**

All of the web pages on the Internet, accessed using a browser.

#### **Wireless (wifi)**

Devices that are connected without wires or cables. They communicate via radio waves.

## X Y Z

#### **You Tube**

A video sharing and streaming platform.

#### **Zip**

A compressed file format for emailing files or downloading.

