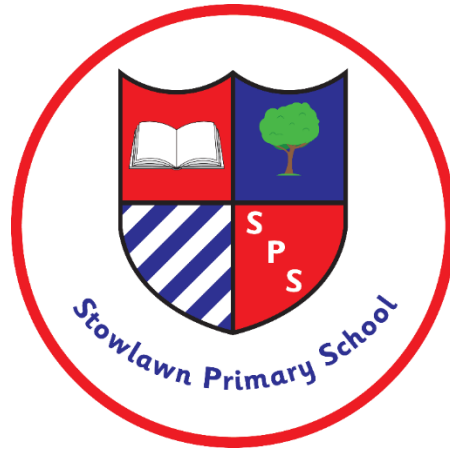# Vocabulary Progression for NCCE Computing Curriculum
Y1 – Y6

Part A-
Vocabulary Progression from Scheme of Work

(Please note: Some Key vocabulary is evident in successive year groups to ensure that concepts and terminology are embedded for all children)

Part B
Glossary of Computing Terms.

Autumn 1 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Information Technology and Networks	Technology around us	IT around us	Connecting computers	The Internet	Sharing information	Communication
	Technology Computer, mouse, trackpad, keyboard, screen, double-click typing	information technology (IT), computer barcode, scanner/scan	Digital device, input, process, output Program, digital, non-digital Connection, network, network switch Server, wireless access point Network cables, network sockets	Internet, router, network security wireless access point (WAP), router Website, web page, web address, router, routing, web browser World Wide Web, links, files use, content, download, sharing, ownership, permission Information, sharing, accurate, honest, content, adverts	System, connection, digital, input, process, output refine Index, crawler, bot, Ordering, ranking, algorithm, search engine optimisation (SEO) web crawler, content creator, selection,	Search, search engine, Google, Bing, Yahoo!, Swisscows, DuckDuckGo, search engine optimisation (SEO), Communication, internet public, private, one-way, two-way, one-to-one, one-to-many, SMS, email, WhatsApp, blog, YouTube, Twitter, BBC Newsround

Autumn 2 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Creating Media	**Creating media** Digital painting	**Creating media** Digital photography	**Creating media** Animation	**Creating media** Audio editing	**Creating media** Video editing	**Creating media** Web page creation
	paint program, tool, paintbrush, erase, fill, undo primary colours, shape tools, line tool, fill tool, undo tool feelings, colour, brush style pointillism, brush size Georges Seurat, pointillism, painting, computers, like, prefer, dislike	Device, camera, photograph, capture, image, digital Landscape, portrait Framing, subject, compose Light sources, flash, focus, background Editing, filter Format, lighting,	Animation, flip book Stop-frame frame, sequence, image, photograph Setting, character, events, onion skinning consistency Evaluation, delete, media, import, transition	Audio, microphone, speaker, headphones, input device, output device sound, podcast, edit, trim, align layer, import record, playback, selection load, save, export, MP3 editing, evaluate, feedback	Video, camera, talking head, panning, close up Video camera, lens, close up, mid range, long shot, moving subject, side by side, high angle, low angle, normal angle Static camera, zoom, pan, tilt, storyboard	Website, web page, browser, media, Hypertext Markup Language (HTML) logo, layout, header, media, purpose Copyright, fair use Web page, home page, preview, Google Sites breadcrumb trail, navigation, hyperlink, subpage website, implication, external link, embed

Spring 1 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Programming A	Moving a robot	Robot algorithms	Sequence in music	Repetition in shapes	Selection in physical computing	Variables in games
	Forwards, backwards, turn, clear, go, commands Instructions, directions Left, right Plan, algorithm, program Route	Instruction, sequence, clear, unambiguous, algorithm, program order, prediction, Artwork, design, route, mat Debugging, decomposition	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop motion, turn, point in direction, go to, glide Sequence, Event, task, design, run the code order, note, chord Design, algorithm, bug, debug	Program Turtle — Commands Code snippet Algorithm Design Debug — Logo commands Pattern, repeat, repetition, count-controlled loop, algorithm, value trace, value Decompose procedure	Microcontroller, components, connection, infinite loop output, motor, repetition, count-controlled loop Crumble controller, switch, motor, LED, Sparkle, crocodile clips, connect, battery box, program, condition Input, selection, condition, action debug	Variable, change, name, value Set design, event algorithm, code Task, artwork, program, project, code, test, debug Improve, evaluate, share

Spring 2 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Data and information	Grouping data	Pictograms	Branching databases	Data logging	Flat-file databases	Spreadsheets
	Object, label, group, search, image Property, colour, size, shape Value data set more, less, most, fewest same	More than, less than, most, least, organise, data, object, tally chart, votes, total Pictogram, enter, count explain more common, least common Attribute, group, same, Attribute, compare, conclusion sharing, data	Attribute, value, questions, table, objects Branching database, database, equal, even, separate structure, compare, order, organise selecting decision tree	Data, table, layout Input device, sensor, data logger logging, data point, interval Analyse, data set, import, export logged, collection Analyse, review, conclusion	Database, data, information, record, field, sort, order, group search value, criteria graph, chart, axis, compare, filter presentation	Spreadsheet, data, data heading, data set, cells, columns and rows. data item, , object, application, format, common attribute Formula, calculation, cell reference calculate, operation, range, duplicate, sigma Propose, question organised Graph, chart, evaluate, results

Summer 1 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Creating Media	**Creating media** Digital writing	**Creating media** Making music	**Creating media** Desktop publishing	**Creating media** Photo editing	**Creating media** Vector drawing	**Creating media** 3D Modelling
	Word processor, keyboard, keys, letters, type Numbers, space, backspace, text cursor Capital letters, toolbar, bold, italic, underline Mouse, select, font Undo, redo, font, format Compare, typing, writing	Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions Pattern, rhythm, pulse Neptune, pitch, tempo, notes, instrument, Create, emotion, pitch, pulse/beat Open, edit	Text, images, advantages, disadvantages, communicate Font, font style, communicate, template Landscape, portrait, orientation, placeholder, layout, content Desktop publishing, copy, paste, Purpose benefits	Image, edit, arrange, select, digital, crop, undo, save search, copyright, composition, pixels, rotate, flip adjustments, effects, hue/saturation, sepia, version, illustrator, vignette retouch, recolour, clone, magic wand, adjust, alter, sharpen, brighten fake, real, cut, copy, paste, background, foreground publication, elements, original, border, layer,	Vector, drawing tools, object, toolbar Vector drawing, move, resize, colour, rotate, duplicate/copy Zoom, select, align, modify Layers, Copy, paste, group, ungroup, drawing, reuse Reflection	2D, 3D, shapes, select, move, perspective, view Handles, resize, lift, lower, recolour Rotate, duplicate, group Cylinder, placeholder, hollow 3D shapes, choose, combine Construct, evaluate, modify

Summer 2 Vocabulary	Y1 Key Vocabulary	Y2 Key Vocabulary	Y3 Key Vocabulary	Y4 Key Vocabulary	Y5 Key Vocabulary	Y6 Key Vocabulary
Programming Unit B	Introduction to animation	An introduction to quizzes	Events and actions	Repetition in games	Selection in quizzes	Sensing
	ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area Block, joining, **Start** block, run, program, , background, delete, reset, algorithm, predict Effect, change, value Instructions, appropriate	Sequence, command, program, run, start outcome, predict, blocks Sprite, algorithm, design, Actions, modify, change Design, build, Compare, debug, features, evaluate match	Motion, event, sprite, algorithm, logic Move, resize, Extension block, pen up, set up Pen, design, event, action, Debugging, errors, setup code, test, debug,	Scratch, programming, sprite, blocks, code, loop, repeat, value infinite loop, count-controlled loop, costume Repetition, forever, , animate, costume, event block, duplicate modify, design debug, refine, evaluate	Selection, condition, true, false, count-controlled loop true, false, outcomes, conditional statement (the linking together of a condition and outcomes), algorithm, program, debug question, answer, algorithm, program, debug Task, Design Implement test, run setup	Micro:bit, MakeCode, input, process, output, flashing, USB, Trace Selection, condition, if then else, variable, random variable, sensing, accelerometer, value Compass, direction, navigation algorithm, step counter Plan, create, code, test, debug

Vocabulary Progression for NCCE Computing Curriculum

Part B
Glossary of Computing Terms.

Term	Key Stage	Definition
Algorithm	1&2	A precise set of ordered steps that can be followed by a human or a computer to achieve a task
Attribute (property)	1&2	A word or a phrase that can be used to describe an **object** such as its colour, size, or price
Browser	2	SEE: Web browser
Code	1&2	The **commands** that a **computer** can **run**
Code snippet	1&2	A section of a **program** viewed in isolation
Command	1&2	A single instruction that can be used in a **program** to control a **computer**
Computer	1&2	A **programmable** machine that accepts and **processes inputs** and produces **outputs** (input, process, output; IPO)
Computer network	2	A group of interconnected computing devices
Computer system	2	A combination of **hardware** and **software** that can have **data input** to it, which it then **processes** and **outputs**. It can be **programmed** to perform a variety of tasks.
Condition	2	A statement that can be either True or False
Condition-controlled loop	2	SEE: Loop (condition-controlled)
Count-controlled loop	2	SEE: Loop (count-controlled)
Data	1&2	A letter, word, number etc. that has been collected for a purpose, but **stored** without context
Data set	2	A collection of related **data**
Debugging	1&2	The process of finding and correcting errors in a **program**
Decompose	2	To break down a task into smaller, more achievable steps

Term	Key Stage	Definition
Digital device	2	A computer or a device with a computer inside that has been programmed for a specific task
Domain name	2	The part of a **website**'s **URL** that is user friendly and identifies that it is under the control of a particular person or organisation e.g. raspberrypi.org
Execute (run)	2	SEE: Run
Hardware	2	The physical parts of a **computer system**
HTML (HyperText Markup Language)	2	A standardised language used to define the structure of **web pages**
Hyperlink	2	(Also: link, weblink) Text or media that when clicked, takes the user to another specified location (**URL**)
Infinite loop	2	SEE: Loop (infinite)
Information	1&2	**Data** put into a context that provides meaning
Information technology	1	The study, use, and development of **computer systems** for storing, processing, retrieving, and sending information
Input	2	**Data** that is sent to a **program** to be **processed**
Input device	2	A piece of **hardware** used to control, or send **data** to, a **computer**
Internet	2	The global system of interconnected **computer networks**
Loop	2	(**Count-controlled**, **condition-controlled**, or **infinite**) **Commands** that repeatedly **run** a defined section of **code**
Loop (condition-controlled)	2	A **command** that repeatedly **runs** a defined section of **code** until a **condition** is met
Loop (count-controlled)	2	A **command** that repeatedly **runs** a defined section of **code** a predefined number of times

Term	Key Stage	Definition
Loop (infinite)	2	A **command** that repeatedly **runs** a defined section of **code** indefinitely
Network	2	SEE: Computer network
Object	1	Something that can be named and has other **attributes** (**properties**), which can be labelled
Object	2	Something that is uniquely identifiable and has **attributes**
Output	2	The result of **data processed** by a **computer**
Output device	2	A piece of **hardware that** is controlled by **outputs** from a **computer**
Procedure	2	A named set of **commands** that can be called multiple times throughout a **program**. This type of **subroutine** does not return a value.
Process	2	A **program**, or part of a **program**, that is running on a **computer**
Program	1&2	A set of ordered **commands** that can be **run** by a **computer** to complete a task
Property (attribute)	1	A word or a phrase that can be used to describe an **object** such as its colour, size, or price
Repetition	2	Part of a **program** where one or more **commands** are **run** multiple times in a **loop**
Router	2	A device that manages the flow of data between **computer networks**
Run (execute)	1&2	To action the **commands** in a **program**
Selection	2	Part of a **program** where if a **condition** is met, then a set of **commands** is **run**
Server	2	A networked **computer** that manages, **stores,** and provides **data** such as files to other computers
Software	2	The **programs** used to control **computers** and perform specific tasks

Term	Key Stage	Definition
Stored (data)	2	**Data** kept digitally so that it can be accessed by a computer
Subroutine	2	A named sequence of **commands** designed to perform a specific task
Switch (network switch)	2	A device that manages the flow of **data packets** within a **computer network**
Technology	1	The use of scientific knowledge for practical purposes
URL (Uniform Resource Locator)	2	The address of a file on the **internet**
Variable	2	A named piece of **data** (often a number or text) **stored** in a computer's memory, which can be accessed and changed by a **computer program**
Web	2	SEE: WWW (World Wide Web)
Web address	2	SEE: URL (Uniform Resource Locator)
Web browser	2	A **program** used to view, navigate, and interact with **web pages**
Web page	2	A **HTML** document viewed using a **web browser**
Website	2	A collection of interlinked **web pages**, stored under a single **domain**
WiFi	2	A technology that allows devices to wirelessly access a **network** and transfer **data**
WAP (Wireless Access Point)	2	A network device that allows wireless computing devices to connect to a wired **network**
WWW (World Wide Web)	2	A service provided via **the internet** that allows access to **web pages** and other shared files