

“As unique individuals, we do our best at work and play for the love of God and others.”



Sticky Knowledge: Computing

Year 1	Year 2
<p style="text-align: center;"><u>Getting Started</u></p> <p>I can log into a laptop, and use a left click on a mouse/mousepad</p> <p><u>Vocabulary:</u> account, clipart, computer, log on, log off, mouse, password, resize, screen (monitor), software, tool, username</p>	<p style="text-align: center;"><u>What is a computer</u></p> <p>I can describe what makes up a computer</p> <p><u>Vocabulary:</u> battery, buttons, computer, desktop, device, electricity, input, invention, keyboard, laptop, screen (monitor), mouse, output, technology, wires</p>
<p style="text-align: center;"><u>Bee-bot</u></p> <p>I can input instructions into a bee bot</p> <p><u>Vocabulary:</u> algorithm, Bee-Bot, computing code, computer program, explain, explore, instructions, predict, tinker, video, virtual</p>	<p style="text-align: center;"><u>Word Processing</u></p> <p>I can modify a text using paste or copy</p> <p><u>Vocabulary:</u> backspace, bold, copy, copyright, cut, delete, highlight, image, import, italics, keyboard, keyboard character, paste, redo, space bar, touch typing, underline, undo, word processing</p>
<p style="text-align: center;"><u>Digital Imagery</u></p> <p>I can take photos using a device, I can search for images online.</p> <p><u>Vocabulary:</u> camera, collage, crop, delete, download, drag and drop, editing software, image, image filter, import, online, photo, resize, save as, search engine, sequence, storage space, visual effects</p>	<p style="text-align: center;"><u>International Space Station</u></p> <p>I can explain how algorithms are used</p> <p><u>Vocabulary:</u> approximate, astronaut, data, digital content, experiment, interactive map, International space station (I.S.S), interpret, laboratory, monitor (verb), satellite, sensor, space, survival, thermometer</p>
<p style="text-align: center;"><u>Introduction to data</u></p> <p>I can collect data and record it. I know what the word data means</p> <p><u>Vocabulary:</u> branching database, categorise, chart, computer, data, information, label, pictogram, record, sort, table, text</p>	<p style="text-align: center;"><u>Stop Motion Devices</u></p> <p>I can explain how stop-motion works</p> <p><u>Vocabulary:</u> animation, animator, contraption, debugging, decompose, design, device, download, film review, filming, frame, import image, plan, onion skinning, sketch, software, stop motion, storyboard, upload</p>
Year 3	Year 4
<p style="text-align: center;"><u>Networks and the Internet</u></p> <p>I can explain that computers are part of a network of interworking mechanisms.</p> <p><u>Vocabulary:</u></p>	<p style="text-align: center;"><u>Presenting Forecasts</u></p> <p>I can sort data in a spreadsheet to serve a purpose</p> <p><u>Vocabulary:</u></p>

desktop, device, DSL (digital subscriber line), file, internet, laptop, network, network map, network switch, router, server, submarine cables, The Cloud, WiFi, wired, wireless, wireless access points	algorithm, atmosphere, automated machine, calculate, climate, design, device, forecast, input, log data, online, predict, record, sensor, source, spreadsheet, units of measurement, weather, weather satellite
<p style="text-align: center;"><u>Scratch</u></p> <p style="text-align: center;">I can edit a template story in scratch to make it my own</p> <p><u>Vocabulary:</u> animation, application, code, code block, debug, decompose, interface, loop, predict, program, remixing code, repetition code, review, Scratch, sprite, tinker</p>	<p style="text-align: center;"><u>HTML</u></p> <p style="text-align: center;">I can Edit a piece of HTML</p> <p><u>Vocabulary:</u> code (verb), content, copyright, CSS (cascading style sheet), fake news, hacker, hex code, HTML (hypertext markup language), internet browser, permission, script, URL (uniform resource locator), web page</p>
<p style="text-align: center;"><u>Journey Inside a Computer</u></p> <p style="text-align: center;">I can describe parts that make up a computer, and the inputs and outputs.</p> <p><u>Vocabulary:</u> algorithm, computer, computer program, CPU, (central processing unit) data, desktop, GPU (graphics processing unit), HDD (hard disk drive), QR code, RAM (random access memory), ROM (read only memory), tablet device, trackpad</p>	<p style="text-align: center;"><u>Collaborative Learning</u></p> <p style="text-align: center;">I can share a google slide, doc, sheet, or form</p> <p><u>Vocabulary:</u> collaborate, comment, e-document, edit, email, icon, insert (file), link, presentation, presentation software, reply, reviewing comments, share, spreadsheet, transition</p>
<p style="text-align: center;"><u>Emailing</u></p> <p style="text-align: center;">I can send an email.</p> <p><u>Vocabulary:</u> battery, buttons, computer, desktop, device, electricity, input, invention, keyboard, laptop, screen (monitor), mouse, output, technology, wires</p>	<p style="text-align: center;"><u>What is computational thinking?</u></p> <p style="text-align: center;">I can demonstrate skills in computational thinking using bebras flashcards</p> <p><u>Vocabulary:</u> abstraction, algorithm design, computer code, code block, computational thinking, computer, decompose, pattern recognition, problem, Scratch, Scratch script, sequence, variable</p>

Year 5	Year 6
<p style="text-align: center;"><u>Online Safety</u></p> <p style="text-align: center;">I can explain some of the risks of internet access.</p> <p><u>Vocabulary:</u> anonymity, application, bill payer, bullying, communication, emoji, gif, hack, interpreted, judgement, meme, mental health, misinterpreted, passwords, permissions, private information, reliable, reputation, trusted adult, victim, wellbeing</p>	<p style="text-align: center;"><u>Bletchley Park 1</u></p> <p style="text-align: center;">I can explain the importance of secure passwords</p> <p><u>Vocabulary:</u> acrostic code, brute force hacking, caesar cipher, chip and pin system, cipher, date shift cipher, encrypt, invention, Nth letter cipher, password, pigpen cipher, secure, technological advancement, trial and error</p>
<p style="text-align: center;"><u>Micro:bit</u></p> <p style="text-align: center;">I can make an animation in micro:bit</p> <p><u>Vocabulary:</u> .hex file, .zip file, bluetooth, code block, decompose, emulator, feature, loop, Micro:bit, pedometer, predict, program, systematic, tinker, USB universal serial bus), variable</p>	<p style="text-align: center;"><u>Big Data</u></p> <p style="text-align: center;">I can use Excel to navigate a data set in order to answer simple questions</p> <p><u>Vocabulary:</u> barcode, boolean, brand, commuter, contactless, data, data privacy, encrypt, infrared waves, NFC (near field communication), QR (quick response) code, radio waves, RFID (radio frequency identification), signal systems or data analyst, transmission</p>

<p style="text-align: center;"><u>Mars Rover 1</u></p> <p style="text-align: center;">I can explain that binary code is a computational language</p> <p><u>Vocabulary:</u> binary code, data, data transmission, discovery, distance, input, Mars Rover, moon, numerical data, output, planet, radio signal, research, scientist, sequence, signal, computer simulation, space (astronomy)</p>	<p style="text-align: center;"><u>Big Data 2</u></p> <p style="text-align: center;">I can identify ways in which data has uses in our lives</p> <p><u>Vocabulary:</u> big data, bluetooth, corrupt data, digital revolution, GPS (global positioning system), infrared waves, IoT (internet of things), QR code, RFID, SIM, smart city, smart school</p>
<p style="text-align: center;"><u>Mars Rover 2</u></p> <p style="text-align: center;">I can explain what a pixel and how this relates to an image</p> <p><u>Vocabulary:</u> algorithm, binary image, bit, bit pattern, CAD (computer-aided design), compression file, CPU (central processing unit), data, digital image, encode, image, JPEG (joint photographic experts group), memory, operating system, pixels, RGB (red, green, blue)</p>	<p style="text-align: center;"><u>Bletchley Park 2</u></p> <p style="text-align: center;">I can record a piece of audio and upload it</p> <p><u>Vocabulary:</u> background noise, byte, computer, CPU, device, gigabyte, kilobyte, megabyte, memory storage, mouse, operating system (OS), radio play, ROM, sound effects, terabyte, touch screen, trackpad</p>