| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---|---|---|---|---|---|---|
| Year 1 | 1. Computing systems and networks – Technology around us | 2. Creating media – Digital painting | 5. Creating media – Digital writing | 4. Data and information – Grouping data | *3. Programming A – Moving a robot* | 6. Programming B - Programming animations |
| Curriculum Links | | Art- Kandinsky | | Maths - shape | | |
| Device | Laptops (mouse skills) | iPads | iPads | Unplugged for 1-4, lesson 5 and 6 will need **laptops** to save documents | Beebots | iPads |
| Resource | ncce.io/drag https://paintz.app/ | https://paintz.app/ | Word processing app/program | Files on the laptops | | Scratch Jr app – saves automatically rename for each new project |
| Year 2 | 1. Computing systems and networks – IT around us | 2. Creating media – Digital photography | 5. Creating media - Digital music | 4. Data and information – Pictograms | 3. Programming A – Robot algorithms | 6. Programming B - Programming quizzes |
| Curriculum Links | | | Music | Maths | | |
| Device | Unplugged | iPads | **iPads** | IPads or laptops – screen shot or print from laptops | Beebots | iPads |
| Resource | | Pixlr app | Chrome Music labs – free to use, save piece of work on iPad (can be airdropped) | j2e pictogram | | Scratch Jr – saves automatically rename for each new project |
| Year 3 | 1. Computing systems and networks – Connecting Laptops | 3. Programming A - Sequencing sounds | 2. Creating media - Stop-frame animation | 4. Data and information – Branching databases | 6. Programming B - Events and actions in programs | 5. Creating media – Desktop publishing |
| Curriculum Links | | | Literacy /History /Geography/ Science | Science/Maths | | Most subjects and topics |
| Device | iPad | iPad | iPads | Laptops or iPads | iPads | iPads or laptops |
| Resource | Lesson 3- Sketch it app | Scratch (Website not Scratch Jr app) | iMotion | https://www.j2e.com/jit5#branch | Scratch | Canva – **parental consent required** |
| Year 4 | 1. Computing systems and networks – The Internet | 2. Creating media - Audio production | 3. Programming A – Repetition in shapes | 5. Creating media – Photo editing | 4. Data and information – Data logging | 6. Programming B – Repetition in games |
| Curriculum Links | | Music | | | | |
| Device | IPads or Laptops | IPads and headphones | IPads or Laptops (will be easier) | iPads | TTS data logger | Laptops but iPads can be used |
| Resource | https://musiclab.chromeexperiments.com/ | Use GarageBand on iPads | turtleacademy.com/playground | Photo editing app | | scratch.mit.edu |
| Year 5 | 1. Computing systems and networks - Systems and searching | 2. Creating media - Video production | 5. Creating media – Introduction to vector graphics | 4. Data and information – Flat-file databases | 3. Programming A – Selection in physical computing | 6. Programming B – Selection in quizzes |
| Curriculum Links | Researching any topic | Any topic | | | D&T/Science | |
| Device | iPads | iPads | IPads or Laptops | IPads or Laptops | | Laptops but iPads can be used |
| Resource | Google.co.uk | iMovie | Vectr | http://www.j2e.com/help/videos/datags4 | Crumble starter kit- one per pair | scratch.mit.edu |
| Year 6 | 1. Computing systems and networks - Communication and collaboration | 2. Creating media – Web page creation | 3. Programming A – Variables in games | 4. Data and information - Introduction to Spreadsheets | 5. Creating media – 3D Modelling | 6. Programming B - Sensing movement |
| Curriculum Links | | | | | D&T | |
| Device | iPads | IPads/Laptops | Laptops but iPads can be used | IPads | IPads or Laptops | |
| Resource | Scratch is recommended and Google Classroom can used. | Google slides but could use Powerpoint. | scratch.mit.edu | Excel | https://www.tinkercad.com Set up teacher accounts | micro:bit. |

# Vocabulary Work Bank KS1

## Year 1

| 1.Computing systems and networks - Technology around us | 2.Creating media - Digital painting | 5.Creating media - Digital writing |
|---|---|---|
| technology, computer, mouse, trackpad, keyboard, screen, double-click, typing. | paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers | word processor, keyboard, keys, letters, type, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo, redo, format, compare, typing, writing. |
| **4.Data and information – Grouping** | **5.Programming A - Moving a robot** | **6.Programming B – Programming animations** |
| object, label, group, search, image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same | Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program. | ScratchJr, command, sprite, compare, programming, area, block, joining, start, run, program, background, delete, reset, algorithm, predict, effect, change, value, instructions, design. |

## Year 2

| 1.Computing systems and networks - Information technology around us | 2.Creating media - Digital photography | 5.Creating media - Digital music |
|---|---|---|
| Information technology (IT), computer, barcode, scanner/scan | device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting, | music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit. |
| **4.Data and information – Pictograms** | **3.Programming A - Robot algorithms** | **6.Programming B - Programming quizzes** |
| more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing | instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition | sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code. |

# Vocabulary Work Bank Lower KS2

| Year 3 | | |
|---|---|---|
| **1.Computing systems and networks – Connecting computers** | **3. Programming A - Sequencing sounds** | **2. Creating media – Stop-frame animation** |
| digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets | 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, algorithm, bug, debug, code. | animation, flip book, stopframe, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition. |
| **4. Data and information – branching databases** | **6. Programing B – Events and actions in programs** | **5. Creating media – Desktop publishing** |
| attribute, value, questions, table, objects, branching, database, objects, equal, even, separate, structure, compare, order, organise, selecting, information, decision tree. | motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions. | text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits. |

| Year 4 | | |
|---|---|---|
| **1. Computing systems and networks – The Internet** | **2. Creating media – Audio production** | **3. Programming A – Repetition in shapes** |
| internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts | audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback. | Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure. |
| **5. Creating media – photo editing** | **4. Data and information – Data logging** | **6. Programming B – Repetition in games** |
| image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font | data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion. | Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate. |

# Vocabulary Work Bank Upper KS2

| Year 5 | | |
|---|---|---|
| **1.Computing systems and networks – Systems and searching** | **2. Creating media – Video production** | **5. Creating media – introduction to Vector graphics** |
| system, connection, digital, input, process, storage, output, search, search engine, refine, index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking. | video, audio, camera, talking head, panning, close up, video camera, microphone, lens, mid-range, long shot, moving subject, side by side, angle (high, low, normal), static, zoom, pan, tilt, storyboard, filming, review, import, split, trim, clip, edit, reshoot, delete, reorder, export, evaluate, share. | vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflectio |
| **4. Data and information – Flat-file databases** | **3. Programming A – Selection in physical computing** | **6. Programming B – selection in quizzes** |
| database, data, information, record, field, sort, order, group, search, value, criteria, graph, chart, axis, compare, filter, presentation. | microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer | Selection, condition, true, false, count-controlled loop, outcomes, conditional statement, algorithm, program, debug, question, answer, task, design, input, implement, test, run, setup, operator |

| Year 6 | | |
|---|---|---|
| **1.Computing systems and networks – Communication and collaboration** | **2. Creating media – Webpage creation** | **3. Programming A – Variables in games** |
| communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, oneway, two-way, one-to-one, one-to-many | website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed. | variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare |
| **4. Data and information – Introduction to spreadsheets** | **5. Creating media – 3D modelling** | **6. Programming B – Sensing movements.** |
| data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools. | TinkerCAD, 2D, 3D, shapes, select, move, perspective, view, handles, resize, lift, lower, recolour, rotate, duplicate, group, cylinder, cube, cuboid, sphere, cone, prism, pyramid, placeholder, hollow, choose, combine, construct, evaluate, modify. | Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug. |