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| **Computing (Creative Technologies) Key Stage 1 Standard** | | | | | | |
| **S**  **T**  **A**  **G**  **E** | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
| ICT & Office Skills | Programming | Presentation | Modelling | Computer Art | Control |
| 1 | Use keyboard to write name with capital Know & use a range of technology Talk about technology’s function Safely use technology by opening and closing a piece of equipment safely Identify, locate & use suitable program Copy & edit information | **Scratch**  Describe and use instructions to program a character  Program a character to grow/ shrink  Instruct to move at different speeds  Use repeat instruction  Instruct to play sound  Create a series of instructions | Use a template  Present likes and dislikes using images and text Use alignment and positional techniques to present data more professionally Use animation Use transitions  Add additional slides | Use an art package or drag and drop software to create a representation of a real or a fantasy situation  Play simple online games which reflect real games or complete quizzes and discuss the rules  Independently, create a simple printable model and with support, construct the 3D model.  Enter basic information into a simulation (i.e. spreadsheet) | Paint with different colours Paint with different brushes Create and fill shapes Make changes to improve Add text to a painting Make a poster Use an online package to draw a face | Use j2e.com/jit5# to control simple icons, follow instructions Use simple commands (U, D, L, R) Use repeat function Change variables (speed, repeat) Insert & edit a character  **Floor robots:**  Identify & plan out a route |
| 2 | Describe how technology works in a variety of different contexts Select appropriate piece of technology for purpose and communicate this Save & retrieve work  Use editing techniques (crop, re-size, align)  Use basic operations within software (SAVE, OPEN, PRINT)  Use log on and off independently | **Scratch / Turtle**  Move or rotate a turtle Use the repeat command  Create movement and sound  Create a program with a START button  Add sprites  Change a backdrop | Follow a design plan (given) Create an information page (i.e. 3 x bullets + 1 image) Add colour to a presentation  Add shapes to a presentation  Experiment with animation  Navigate a slideshow (previous/next) | Discuss their use of simulations and compare with reality  Enter information into a basic computer simulation and explore the effects of changing the variables in simulations  Play a game or quiz reflecting a real game or quiz  Enter data including currency/text/number  Perform basic calculations using a simple formula (with help) | Create computer art Use tools to create a style of art Make and edit shapes to create art Change the shade of colour for effect Retrieve a file to edit  Compare an image created online and offline | Use j2e.com/jit5# to control simple icons, animate (stop-motion) Use 1+ characters Insert custom character (web, self) Use simple rules (bounce) Use commands (key press)  **Floor robots:** Plan a more complex route Identify a best route Predict goals & failures Recognise errors |
| **Computing (Creative Technologies) Key Stage 2 Standard** | | | | | | | |
| **S**  **T**  **A**  **G**  **E** | SPRING 2 | SPRING 1 | SUMMER 1 | AUTUMN 1 | AUTUMN 2 | SUMMER 2 | |
| ICT & Office Skills | Programming | Presentation | Modelling | Photo & imaging | Control | |
| 3 | Navigate the internet simply Find relevant information using a menu Search online by keyword Use bookmarks Know the term browser Navigate a variety of programmes | Control a character using the keyboard  Control a character automatically  Add a behaviour (collect, disappear)  Create and debug using move, rotate, repeat  Use pen up/down to draw initials  Draw rectangle / square  Draw patterns | Select a template for a purpose  Use arrangement to avoid overlap etc  Divide presentation into appropriate sections  Use tables  Add simple navigation  Adhere to style | Use a spreadsheet to store information  Read information from a spreadsheet and discuss the information  Add two cells to give a total  Highlight information and create a bar chart  Add borders / shading  Create landscapes & add objects (scale) | Draw shapes and lines Order and group objects Manipulate shapes and lines Recognise effective layout  Combine text and images  Achieve consistency in layout | https://www.j2e.com/logo.html  Use symbols to represent movement Use commands to affect movement Use ÷ to calculate degree of turn  **Logo:**  Identify shapes and angles Identify commands (fd, bk, lt, rt) Use commands (fd, bk, lt, rt) Navigate a simple route  Recognise the ‘best’ route | |
| 4 | Use a variety of technology to suit a particular purpose Open a variety of links and use them Use a range of digital devises and combine a variety of software Make accurate predictions about the outcome of a programme Decide appropriate sections to copy and paste from a variety of web pages Download a document to a computer | Control using keyboard and automatic  Add behaviours of multiple aspects (disappear, punishment etc)  Add a variable  Change a variable using script  Add a rule (touching, re-locate)  Change the appearance using script | Use e-mail to send work to teacher Choose images and download into a file Create a stop motion animation Capture images using webcams, screen capture, scanning, internet Transfer graphics from a range of sources and use them in a desktop publishing program | Format currency cells  Begin to extract information from the spreadsheet to answer specific questions  Use Fill to find totals for many rows  Create a table and a bar chart independently  Independently use software to create landscape and add object  Use measurements to calculate scale of objects in proportion | Take landscape images considering ‘frame’  Remove background from simple background image Add image to new background (stage) Combine multiple images suitably Understand portrait & landscape  Gather images that represent actions for a schedule or sequence Order images into logical sequence | Identify a likely scenario  Write simple programs  Sequence a simple procedure Control and activity Sequence programs Use inputs | |
| 5 | Know a variety of file formats & save an image document as a gif or jpeg Save and retrieve information online Know which websites are likely to give accurate information  Use specific techniques for creating a specific document (e.g. Letter, CV)  Create and adhere to a ‘style’  Create formal and informal documents | Design own backdrop using blocks to make a maze/track  Edit a character  Program consequences  Test and debug  Add appropriate commentary to a script  Add variable and use code to change it | Use ‘cc’ and ‘bcc’ Collaborate with peers on a project Edit video, apply effects and transitions Use an alternate method of transition (auto, hyperlink)  Use timings  Make a homepage linking to other pages | Sort data into order  Calculate on more than 2 fields using SUM  Calculate profit/loss type figure  Change data to improve result  **3DSlash.net**  Use tools to reduce a shape  Use tools to colour a shape | Remove background from more complex image backgrounds Save edited images as a new image file Find and gather alike images into collections  Combine media to tell a story (text/image)  Use self-taken photo to edit into a story/sequence/instruction  Use background removal to create adverts / images for purpose | Write, debug programs  Sequence a procedure Control/simulate physical systems Sequence, select, repeat programs Use variables, inputs Explain algorithms | |
| 6 | Use tabs to compare websites Refine internet searches Use a wide range of document presentation techniques for text/images  Create a template (.dot)  Use shortcuts for common procedures (CTRL + Z, X, C, V, B, A, S, P, WIN+E)  Affect paragraph and page setup options | Design own backdrop using blocks to make a floor / platform  Create and edit a character  Program rules (falling / landing  Test and debug  Translate script into sentences  Work with multiple variables (speed, score etc) | Use software to create/manipulate music and sound Use text formatting tools; heading and body Experiment with images (colour effects, options, snap to grid, grid settings Create a (non)linear presentation Make a presentation that contains sound, animation, video and buttons to navigate Consider good design principles; best media to use and needs of the audience and impact | Use filters in a spreadsheet  Create combo boxes to select data  **3DSlash.net:** Create initial from your name  Create symbol i.e.+, !  Design a game and discuss rules  Design a game and discuss changing variables | Identify a range of photos (family, locations)  Save and name photos  Use photos in a collage or video and accompany with text, music, effects  Export image collection as video or single image  Create a professional logo for a company using good concepts  Use image editing techniques to export and use the logo in products | Design, write, debug programs  Split a procedure into sequence Control/simulate physical systems Sequence, select, repeat programs Use variables, inputs, outputs Use logical reasoning to explain algorithms | |

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| **Computing (Creative Technologies) Key Stage 3 Standard** | | | | | | |
| **S**  **T**  **A**  **G**  **E** | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
| Networks & WWW | Programming | Communication & Presentation | Modelling | Creative: Website | Control |
| 7 | State how you use a network  Identify items on a network HW & SW roles within networks  Understand wired and wireless attributes  Plan out an example network  List pro’s and con’s | **Scratch Project:** Design & create a multi-directional game (U, D, L, R) Plan for & implement ‘objectives’ (things to achieve) Plan for & implement failures (things to avoid) Understand & implement a working variable (score, lives, level) | Understand how people communicated  Provide examples of past communications  Understand how people now communicate  Provide examples of modern communication Understand positives and negatives of each method | Enter 2 types of data into a spreadsheet  Format data accordingly  Format cells accordingly  **3DSlash.net:**  Use 3D software to draw simple shapes  Create 3D shapes using the keyboard and mouse  Create intersections within shapes to show depth  Create subsequent shapes alongside existing shapes according to ¼, ½ etc of the original’s size. | PPT: Master page Internal links External links Video Removal of ‘on click’ | Identify safety concerns for a real-life system to provide a solution to  Design a real-world system  Evaluate a real-world system  Create a flow-chart to reflect system choices  Label an image with inputs/outputs |
| 8 | Finding out: train times, TV schedules, latest news/weather, mobile phone deals  Using online databases (booking holidays, event tickets)  Social Media – permissions for friends, public etc  State categories of online features (gaming, shopping, social media etc) | Scratch Project: Add levels Increase complexity of game Add custom elements to game  Add appearance of movement (animated characters)  Add pre-game choice (character/speed)  Add stored variable (high score) | Use email address book Open & send attachment Use publishing tools to create posters, leaflets Create a presentation changing the layout of slides and adding images and sound Use a computer to sequence short pieces of music using a small selection of prerecord sounds Improve work by using spell checker | Calculate using addition and multiplication  Use techniques within software to calculate more efficiently  **3DSlash.net:**  Scale out a shell representation (i.e. house)  Add colour to distinguish aspects  Add and remove from a 3D model  Use a range of tools to build a 3D model | List features of a website  Research good design principles from other sites  Use good design principles found on other websites. | Identify control technology  Identify advantages of computers controlling events  Identify disadvantages of computers controlling events  Identify controlled systems in the home and plan their control events  Plan a flowchart with inputs, decisions, outputs, subroutines |
| 9 | Understand advantages & disadvantages of networks Understand advantages & disadvantages of WWW  Research WWW and original thoughts  Create timeline of important events  Present arguments for/against WWW | **GAME: Mini-project**  Design own game (characters, rules, objectives, backdrops)  Write back story to game  Design packaging for game including rating  Test game on peers/staff  Improve game in suggested way(s)  Evaluate game/improvements | Create a basic user guide for a topic (email, slideshows etc)  Use appropriate screenshots and labels  Cover most expected topics  Create a linked contents page  Use Master to provide common features (home, previous/next) | Independently create a chart using min. 2 sets of data  Label a chart suitably  **3DSlash.net:**  Add interior features to a model (i.e. furniture)  Add appropriate scaling to a model (sizes of floors, furniture  Compare 2 pieces of 3D modelling software  Use 2 pieces of modelling software | List and detail features of a website  Screenshot and label good design principles from other websites  Recreate a good design principle from an existing website  Link to a file from a website | Gather a controlled aspect locally (photo-ATM?)  Label features of the aspect (input, output) and describe processes  Create a flowchart (with subroutines) to follow the course of possible events  Using Level Crossing/CarPark think of all separate actions  Create (sub)routines for each |

**E-Safety | One strand within each Year Group to be delivered as the focus of the session. Session to be the last one of each term.**

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| **Y1**   1. Use technology safely & respectfully 2. Keep personal information private 3. Know how to seek help & support 4. Use a range of software 5. Suggest appropriate content 6. Collect data & information | **Y2**   1. Recognise (un)acceptable behaviour 2. Identify ways to report 3. Use a range of devices (iPad photo) 4. Create product for given goal 5. Collect & analyse data & information | **Y3**   1. use technology safely, responsibly 2. recognise (un)acceptable behaviour; identify ways to report concerns 3. use a variety of software (inc internet) on a range of devices 4. design and create a range of products for given goals; 5. Collect, analyse, evaluate, present data and information |
| Y4   1. I know that some messages may hurt people’s feelings 2. I can use a search engine 3. I understand ‘plagiarism’. 4. I know what’s needed to create a safe online profile (username & p/w) 5. I can create and label an online safety character | Y5   1. I know what an email is 2. Recognise a SPAM email (unknown sender) 3. Create a strong password 4. Recognise an online ‘edited’ photo 5. Relate online safety to real world | Y6   1. I can name platforms where cyber-bullying may occur 2. I can say what bullying & cyber-bullying are 3. Recognise similarities & differences between bullying & cyber-bullying 4. Identify strategies to deal with cyber-bullying 5. I know why cyber-bullying can be just as harmful as bullying |
| **Y7**  Use [SMART](https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s) to present an advice sheet:   1. Safe 2. Meet 3. Accepting 4. Reliable 5. Tell | **Y8**   1. Understand Social Media positives & negatives 2. Recognise Social Media icons 3. Give examples of positive and negative posts 4. Acknowledge repercussions 5. State advice points for users | **Y9**  Identify methods to overcome problems online;   1. social media 2. everyday computer use 3. email 4. programs 5. music & video |