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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 capitalKnow & use a range of technologyTalk about technology’s functionSafely use technology by opening and closing a piece of equipment safelyIdentify, locate & use suitable programCopy & edit information | **Scratch**Describe and use instructions to program a characterProgram a character to grow/ shrinkInstruct to move at different speedsUse repeat instructionInstruct to play soundCreate a series of instructions | Use a templatePresent likes and dislikes using images and textUse alignment and positional techniques to present data more professionallyUse animationUse transitionsAdd additional slides | Use an art package or drag and drop software to create a representation of a real or a fantasy situationPlay simple online games which reflect real games or complete quizzes and discuss the rulesIndependently, create a simple printable model and with support, construct the 3D model.Enter basic information into a simulation (i.e. spreadsheet) | Paint with different coloursPaint with different brushesCreate and fill shapesMake changes to improveAdd text to a paintingMake a posterUse an online package to draw a face | Use j2e.com/jit5# to control simple icons, follow instructionsUse simple commands (U, D, L, R)Use repeat functionChange variables (speed, repeat)Insert & edit a character**Floor robots:**Identify & plan out a route |
| 2 | Describe how technology works in a variety of different contextsSelect appropriate piece of technology for purpose and communicate thisSave & retrieve workUse 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 turtleUse the repeat commandCreate movement and soundCreate a program with a START buttonAdd spritesChange a backdrop | Follow a design plan (given)Create an information page (i.e. 3 x bullets + 1 image)Add colour to a presentationAdd shapes to a presentationExperiment with animationNavigate a slideshow (previous/next) | Discuss their use of simulations and compare with realityEnter information into a basic computer simulation and explore the effects of changing the variables in simulationsPlay a game or quiz reflecting a real game or quizEnter data including currency/text/numberPerform basic calculations using a simple formula (with help) | Create computer artUse tools to create a style of artMake and edit shapes to create artChange the shade of colour for effectRetrieve a file to editCompare an image created online and offline | Use j2e.com/jit5# to control simple icons, animate (stop-motion)Use 1+ charactersInsert custom character (web, self)Use simple rules (bounce)Use commands (key press)**Floor robots:**Plan a more complex routeIdentify a best routePredict goals & failuresRecognise 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 simplyFind relevant information using a menuSearch online by keywordUse bookmarksKnow the term browserNavigate a variety of programmes | Control a character using the keyboardControl a character automaticallyAdd a behaviour (collect, disappear)Create and debug using move, rotate, repeatUse pen up/down to draw initialsDraw rectangle / squareDraw patterns | Select a template for a purposeUse arrangement to avoid overlap etcDivide presentation into appropriate sectionsUse tablesAdd simple navigationAdhere to style | Use a spreadsheet to store informationRead information from a spreadsheet and discuss the informationAdd two cells to give a totalHighlight information and create a bar chartAdd borders / shadingCreate landscapes & add objects (scale) | Draw shapes and linesOrder and group objectsManipulate shapes and linesRecognise effective layoutCombine text and imagesAchieve consistency in layout | https://www.j2e.com/logo.htmlUse symbols to represent movementUse commands to affect movementUse ÷ to calculate degree of turn**Logo:**Identify shapes and anglesIdentify commands (fd, bk, lt, rt)Use commands (fd, bk, lt, rt)Navigate a simple routeRecognise the ‘best’ route |
| 4 | Use a variety of technology to suit a particular purposeOpen a variety of links and use themUse a range of digital devises and combine a variety of softwareMake accurate predictions about the outcome of a programmeDecide appropriate sections to copy and paste from a variety of web pagesDownload a document to a computer | Control using keyboard and automaticAdd behaviours of multiple aspects (disappear, punishment etc)Add a variableChange a variable using scriptAdd a rule (touching, re-locate)Change the appearance using script | Use e-mail to send work to teacherChoose images and download into a fileCreate a stop motion animationCapture images using webcams, screen capture, scanning, internetTransfer graphics from a range of sources and use them in a desktop publishing program | Format currency cellsBegin to extract information from the spreadsheet to answer specific questionsUse Fill to find totals for many rowsCreate a table and a bar chart independentlyIndependently use software to create landscape and add objectUse measurements to calculate scale of objects in proportion | Take landscape images considering ‘frame’Remove background from simple background imageAdd image to new background (stage)Combine multiple images suitablyUnderstand portrait & landscape Gather images that represent actions for a schedule or sequenceOrder images into logical sequence | Identify a likely scenarioWrite simple programsSequence a simple procedureControl and activitySequence programsUse inputs |
| 5 | Know a variety of file formats & save an image document as a gif or jpegSave and retrieve information online Know which websites are likely to give accurate informationUse 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/trackEdit a characterProgram consequencesTest and debugAdd appropriate commentary to a scriptAdd variable and use code to change it | Use ‘cc’ and ‘bcc’Collaborate with peers on a projectEdit video, apply effects and transitionsUse an alternate method of transition (auto, hyperlink)Use timingsMake a homepage linking to other pages | Sort data into orderCalculate on more than 2 fields using SUMCalculate profit/loss type figureChange data to improve result**3DSlash.net**Use tools to reduce a shapeUse tools to colour a shape | Remove background from more complex image backgroundsSave edited images as a new image fileFind and gather alike images into collectionsCombine media to tell a story (text/image)Use self-taken photo to edit into a story/sequence/instructionUse background removal to create adverts / images for purpose | Write, debug programsSequence a procedure Control/simulate physical systemsSequence, select, repeat programsUse variables, inputsExplain algorithms |
| 6 | Use tabs to compare websitesRefine internet searchesUse a wide range of document presentation techniques for text/imagesCreate 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 / platformCreate and edit a characterProgram rules (falling / landingTest and debugTranslate script into sentencesWork with multiple variables (speed, score etc) | Use software to create/manipulate music and soundUse text formatting tools; heading and bodyExperiment with images (colour effects, options, snap to grid, grid settingsCreate a (non)linear presentationMake a presentation that contains sound, animation, video and buttons to navigateConsider good design principles; best media to use and needs of the audience and impact | Use filters in a spreadsheetCreate combo boxes to select data**3DSlash.net:**Create initial from your nameCreate symbol i.e.+, !Design a game and discuss rulesDesign a game and discuss changing variables | Identify a range of photos (family, locations)Save and name photosUse photos in a collage or video and accompany with text, music, effectsExport image collection as video or single imageCreate a professional logo for a company using good conceptsUse image editing techniques to export and use the logo in products | Design, write, debug programsSplit a procedure into sequenceControl/simulate physical systemsSequence, select, repeat programsUse variables, inputs, outputsUse 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 networkIdentify items on a networkHW & SW roles within networksUnderstand wired and wireless attributesPlan out an example networkList 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 communicatedProvide examples of past communicationsUnderstand how people now communicateProvide examples of modern communicationUnderstand positives and negatives of each method | Enter 2 types of data into a spreadsheetFormat data accordinglyFormat cells accordingly**3DSlash.net:**Use 3D software to draw simple shapesCreate 3D shapes using the keyboard and mouseCreate intersections within shapes to show depthCreate subsequent shapes alongside existing shapes according to ¼, ½ etc of the original’s size. | PPT: Master pageInternal linksExternal linksVideoRemoval of ‘on click’ | Identify safety concerns for a real-life system to provide a solution toDesign a real-world systemEvaluate a real-world systemCreate a flow-chart to reflect system choicesLabel an image with inputs/outputs |
| 8 | Finding out: train times, TV schedules, latest news/weather, mobile phone dealsUsing online databases (booking holidays, event tickets)Social Media – permissions for friends, public etcState categories of online features (gaming, shopping, social media etc) | Scratch Project:Add levelsIncrease complexity of gameAdd custom elements to gameAdd appearance of movement (animated characters)Add pre-game choice (character/speed)Add stored variable (high score) | Use email address bookOpen & send attachmentUse publishing tools to create posters, leafletsCreate a presentation changing the layout of slides and adding images and soundUse a computer to sequence short pieces of music using a small selection of prerecord soundsImprove work by using spell checker | Calculate using addition and multiplicationUse techniques within software to calculate more efficiently**3DSlash.net:**Scale out a shell representation (i.e. house)Add colour to distinguish aspectsAdd and remove from a 3D modelUse a range of tools to build a 3D model | List features of a websiteResearch good design principles from other sitesUse good design principles found on other websites. | Identify control technologyIdentify advantages of computers controlling eventsIdentify disadvantages of computers controlling eventsIdentify controlled systems in the home and plan their control eventsPlan a flowchart with inputs, decisions, outputs, subroutines |
| 9 | Understand advantages & disadvantages of networksUnderstand advantages & disadvantages of WWWResearch WWW and original thoughtsCreate timeline of important eventsPresent arguments for/against WWW | **GAME: Mini-project**Design own game (characters, rules, objectives, backdrops)Write back story to gameDesign packaging for game including ratingTest game on peers/staffImprove game in suggested way(s)Evaluate game/improvements | Create a basic user guide for a topic (email, slideshows etc)Use appropriate screenshots and labelsCover most expected topicsCreate a linked contents pageUse Master to provide common features (home, previous/next) | Independently create a chart using min. 2 sets of dataLabel a chart suitably**3DSlash.net:**Add interior features to a model (i.e. furniture)Add appropriate scaling to a model (sizes of floors, furnitureCompare 2 pieces of 3D modelling softwareUse 2 pieces of modelling software  | List and detail features of a websiteScreenshot and label good design principles from other websitesRecreate a good design principle from an existing websiteLink to a file from a website | Gather a controlled aspect locally (photo-ATM?)Label features of the aspect (input, output) and describe processesCreate a flowchart (with subroutines) to follow the course of possible eventsUsing Level Crossing/CarPark think of all separate actionsCreate (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
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| Y41. 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
 | Y51. 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
 | Y61. 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
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| **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
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