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|  | Multimedia and Word processing | Digital media | Programming  2 forms/languages | Communication and Collaboration | Data | E-Safety |
| 1st Grade | * Begin to word process short narrative and non-narrative texts * Develop basic editing skills including different presentational features (font size, colour and style) * Select from different presentational features e.g. title, paragraph, label etc * Word process short narrative and non-narrative texts * Save, print, retrieve and amend their work * Use the mouse or arrow keys to insert words and sentences * Use appropriate editing tools to improve their work * Make use of graphics, video and sound to enhance their text on screen * Talk about their use of graphics and sound and how it may enhance or change the mood and atmosphere of their presentation and make changes where appropriate * Use different layouts and templates for different purposes | **Graphics**   * Use ICT to source, generate and amend ideas for their art work * Talk about the advantages and disadvantages of using a graphics package over paper based art activities * Develop a variety of skills using a range of tools and techniques to communicate a specific idea or artistic style /effect * Create a stamp to make patterns and designs * Describe to others their use of a paint package and their reason for choice of tools   **Digital Imagery**   * Develop greater control over the digital stills or video camera * Begin to discuss the quality of their image and make decisions (e.g delete a blurred / bad image) * Begin to select and edit and change images * Begin to change or enhance photographs and pictures (crop, re-colour)   **Animation**   * Create a sequence of still images which together form a short animated sequence * Create a simple animation to illustrate a story or idea * Upload their images on the learning platform | **Programming Unit 1: Probots**   * Talk about how everyday devices can be controlled * Know that devices and actions on screen may be controlled by sequences of actions and instructions * Create a sequence of instructions to create a right-angled shape on screen * Create a sequence of instructions to control a programmable robot to carry out a pre-determined route to include direction, distance and turn (on screen or floor robot) * Control a floor robot using appropriate buttons, Make predictions and estimate distances and turns * Experience a range of control devices such as a microscope, sound recorders, cameras and other devices * Control music software through sequencing icons ( see sound and music modules)   **Programming Unit 2: Move the turtle**   * Generate a sequence of instructions including ‘right angle’ turns. * Create a sequence of instructions to generate simple geometric shapes (oblong /square). * Discuss how to improve/change their sequence of commands. | **Messaging**   * Compare all the different ways that messages can be sent and start to consider their advantages and disadvantages * Contribute and discuss ideas to compose and respond to class/group/individual e-mails, forums, blogs   **Publishing: ( Refer to Multimedia Unit)**   * Contribute and discuss ideas to compose and respond to discussions and forums on the Learning platform * Begin to talk about the advantages of using electronic communications in terms of sharing pages and information with a wider audience at home and school * Look and talk about other people’s contributions on the learning platform * Consider who can see their contributions on the learning platform | * Develop different criteria and create own pictograms * Use a simple graphing package to record information – add labels and numbers as appropriate * Use ICT to edit and change the information quickly. * Talk about how ICT helps them to organise their information * Save , retrieve and amend their work * Use a graphs to create and answer questions   **Branching Database**   * Understand the difference between questions and answers * Ask questions that comply with the rule that it can only have a yes or no answer * Use a branching database to identify objects using yes or no questions | **E-Safety**  **Online Research**  Children explore a range of age-appropriate digital resources.  Children to know that not everything they find online is accurate.  Know that some websites contain advertisements (often embedded) and learn how to ignore them.  Children to know what to do if they find something inappropriate online.  Children discuss, understand and abide by the school’s e-Safety SMART Rules  **E-Safety**  **Communication & Collaboration**  Children are able to send suitable and purposeful emails, developing awareness of appropriate language to use.  Children know that passwords help to keep information safe and secure and that they should not be shared  Children contribute to a class discussion forum.  **E-Safety**  **E-Awareness**  Children are aware that not everyone they meet online is automatically trustworthy.  Children understand that personal information is unique to them and should not be shared without a teacher or parent’s permission.  Children identify characteristics of people who are worthy of their trust. |

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| Unit/Project | Statutory requirements/ key skills | Notes | Possible outcomes and activities |
| Multimedia and Word processing  **Comp KS1 3,4 (5)** | * Begin to word process short narrative and non-narrative texts * Develop basic editing skills including different presentational features (font size, colour and style) * Select from different presentational features e.g. title, paragraph, label etc * Word process short narrative and non-narrative texts * Save, print, retrieve and amend their work * Use the mouse or arrow keys to insert words and sentences * Use appropriate editing tools to improve their work * Make use of graphics, video and sound to enhance their text on screen * Talk about their use of graphics and sound and how it may enhance or change the mood and atmosphere of their presentation and make changes where appropriate * Use different layouts and templates for different purposes | **2Create A Story** - a simple story editor that allows children to add pages and draw pictures to go with their story. Simple animations can then be chosen for the pictures.  **2Publish** - many templates to include a number of pictures and sentences. | **Combine text, images and possibly other features to create either a printable document or a simple multimedia presentation. Ensure all choices suit the purpose.**  Literacy – type a story written during literacy and add a picture.  Literacy – Type information texts incorporating labelled pictures and diagrams linked to Where in the World Topic.  Science – write about a concept, such as forces, and add a picture. |
| **Graphics**  **Comp KS1 3,4 (5)** | * Use ICT to source, generate and amend ideas for their art work * Talk about the advantages and disadvantages of using a graphics package over paper based art activities * Develop a variety of skills using a range of tools and techniques to communicate a specific idea or artistic style /effect * Create a stamp to make patterns and designs * Describe to others their use of a paint package and their reason for choice of tools | Suggested Resources  **2simple infant video toolkit** – A range of 2Simple programs e.g. 2Paint – Simple paint program  **2Paint A Picture** – Can produce artwork in different styles e.g. mosaic, impressionism etc...  **2Publish** - many templates to include a number of pictures and sentences.  **2Create A Story** - is a simple story editor that includes pages and an area for pictures. Simple animations can then be chosen for the pictures. | **Use a range of tools in a paint package to create a picture to suit a purpose.**  PSHCE – Children to design a picture based on anything important to them.  Geography – use a paint package to create map of a focus island  DT – use a paint package to create a design for a project or model.  Children could work in pairs to design half a picture each. |
| **Digital Imagery**  **Comp KS1 3,4 (5)** | * Develop greater control over the digital stills or video camera * Begin to discuss the quality of their image and make decisions (e.g delete a blurred / bad image) * Begin to select and edit and change images * Begin to change or enhance photographs and pictures (crop, re-colour)   **Animation**   * Create a sequence of still images which together form a short animated sequence * Create a simple animation to illustrate a story or idea * Upload their images on the learning platform | **Digital camera** -  **Flip Cameras** – Simple filming device which allows for videos to be quickly and easily played on screen  **Windows Movie Maker** - Video editing software which allows  **2Aimate** – Simple animation program  **Photostory 3** (as whole class) - combines photos into a slideshow and allows sound, voice commentary and titles to be added. | **Use a digital camcorder and camera; download with support and use for a purpose**  Topic – Take pictures of different exercises and edit and add labels to suggest how they will help.  Literacy - use a digital camcorder to record drama work.  Literacy – Recreate a story using stop motion animation e.g. using program like Windows Movie Maker (with support)  Take a series of photographs to create an animation or slideshow to illustrate a concept.  Art- Manipulate photos of themselves e.g. make black and white or change colours of different parts |
| Programming Unit 1: Probots  **Comp KS1 1,2, 3 (5)** | * Talk about how everyday devices can be controlled * Know that devices and actions on screen may be controlled by sequences of actions and instructions * Create a sequence of instructions to create a right-angled shape on screen * Create a sequence of instructions to control a programmable robot to carry out a pre-determined route to include direction, distance and turn (on screen or floor robot) * Control a floor robot using appropriate buttons, Make predictions and estimate distances and turns * Experience a range of control devices such as a microscope, sound recorders, cameras and other devices * Control music software through sequencing icons ( see sound and music modules) | **Floor robot** – Use Bee-Bot or Pixie - Devices which allow for input of instructions.  **Mats and obstacles** – There are mats with fixed distance which link to the Bee-Bots  **2 Control NXT** – Simple program which allows the user to control sprites onscreen | **Predict, estimate and create a set of instructions to control a floor robot to move between two or more fixed points involving distance and turn.**  Topic – Class to guide a Probot from one place of an island to another. Debug route until challenge is met.  Maths – ½ and ¼ turns, position, direction and movement, use the robots to make shapes (square, rectangle, octagon), repeating patterns.  PE – movement and turns.  Literacy – use floor robot to visit characters/ pictures from a story in order. |
| **Programming Unit 2: Move the turtle**  **Comp KS1 1,2, 3 (5)** | * Generate a sequence of instructions including ‘right angle’ turns. * Create a sequence of instructions to generate simple geometric shapes (oblong /square). * Discuss how to improve/change their sequence of commands. | Use 2Go in Infant Video Toolkit or online turtle program such as http://www.mathplayground.com/mathprogramming.html | **Create a set of online instructions to meet a challenge e.g. a shape or right angle.**  Maths – Create different simple shapes using program. |
| Communication and Collaboration  **Comp KS1 3,4 (5)** | **Messaging**   * Compare all the different ways that messages can be sent and start to consider their advantages and disadvantages * Contribute and discuss ideas to compose and respond to class/group/individual e-mails, forums, blogs   **Publishing: ( Refer to Multimedia Unit)**   * Contribute and discuss ideas to compose and respond to discussions and forums on the Learning platform * Begin to talk about the advantages of using electronic communications in terms of sharing pages and information with a wider audience at home and school * Look and talk about other people’s contributions on the learning platform * Consider who can see their contributions on the learning platform | **Email** – Class email  **VLE** –School’s online classroom where children’s work can be uploaded. Also has chat, vote, quiz and forum functions  **Link to e-Safety**   * Children know the difference between communicating via email and online in a discussion forum * Children are aware of the different forms of online communication (email, forums, instant messaging and social networking sites) and find out about their associated risks. | **Share and comment on work online, developing understanding about appropriate behaviour and internet safety**  Work with another class to create a shared text through email/forums.  Maths- Send questions to other classes/children around the school and tally the results.  Science – Create a page about Staying Alive and what has been learnt over the topic   * Email to other classes to look at the created page and then respond in a forum |
| Handling Data  **Comp KS1 3,4 (5)** | * Develop different criteria and create own pictograms * Use a simple graphing package to record information – add labels and numbers as appropriate * Use ICT to edit and change the information quickly. * Talk about how ICT helps them to organise their information * Save , retrieve and amend their work * Use a graphs to create and answer questions   **Branching Database**   * Understand the difference between questions and answers * Ask questions that comply with the rule that it can only have a yes or no answer * Use a branching database to identify objects using yes or no questions | Suggested Resources  2simple infant video toolkit – A range of programs such as 2Count which allows the creation of pictograms  2Graph – Input results and create bar, pie or line graphs  2simple infant video toolkit – A range of programs such as 2Question which allows the creation of pictograms | **Use a graphing package and a simple database to collect, organise and classify data, asking and answering questions.**  PSHCE – collect information on favourite snacks, put it in a graph and discuss the results.  Geog – Collect information about the weather each day for a month, organise into graphs to find out the most common weather.  Topic – Collect information about favourite place to visit. Represent as a graph.  Science – Collect information about minibeasts/plants.  Science – Create a database to identify minibeasts. |

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| Unit/Project | Statutory requirements/ key skills | Notes | Possible outcomes and activities |
| **E-Safety**  **Online Research**  **Comp KS1 5** | * Children explore a range of age-appropriate digital resources. * Children to know that not everything they find online is accurate. * Know that some websites contain advertisements (often embedded) and learn how to ignore them. * Children to know what to do if they find something inappropriate online. * Children discuss, understand and abide by the school’s e-Safety SMART Rules | Dongle Stay Safe quiz and reinforce SMART rules from [CBBC Staysafe](http://www.bbc.co.uk/cbbc/help/web/staysafe)  Websites to aid research, e.g.;  [Barnaby website](http://www.bbc.co.uk/schools/barnabybear/) to find out about his trips and how he travels.  School’s Poster ‘Being SMART Online Rules’  SMART Rule – Know that not information online is RELIABLE and true. Ask and adult if you are unsure.  SMART Rules – TELL someone if you see something that makes you feel uncomfortable. | This could be taught as a separate Life Skills lesson or as part of another ICT lesson.  Refer to the E-SMART rules. |
| **E-Safety**  **Communication & Collaboration**  **Comp KS1 5** | Children are able to send suitable and purposeful emails, developing awareness of appropriate language to use.  Children know that passwords help to keep information safe and secure and that they should not be shared  Children contribute to a class discussion forum. | Discussion forums or messaging system on school learning platform.  School email system  SMART Rule – Only send and read MESSAGES with people you know. Messages should always be polite.  SMART Rule – Keep passwords and other special information SAFE | This could be taught as a separate Life Skills lesson or as part of another ICT lesson.  Refer to the E-SMART rules. |
| **E-Safety**  **E-Awareness**  **Comp KS1 5** | Children are aware that not everyone they meet online is automatically trustworthy.  Children understand that personal information is unique to them and should not be shared without a teacher or parent’s permission.  Children identify characteristics of people who are worthy of their trust. | FauxPaw video from [iKeepSafe.org](http://www.ikeepsafe.org/iksc_kids/) to highlight that not everyone is trustworthy  CEOP Thinkuknow resources, based on Hector’s World. [www.thinkuknow.co.uk/5\_7/](http://www.thinkuknow.co.uk/5_7/)  lesson 1 – personal information is special  lesson 2 – not everyone is trustworthy  lesson 3 – assessing trustworthiness  lesson 4 – being alert to unsafe situations  lesson 5 – check with an adult  Dongle Pop video and [StaySafe quiz](http://www.bbc.co.uk/cbbc/help/web/staysafe) (to introduce SMART rules- All but the rule for M is the same as our school’s SMART Rules)  SMART Rules – Know that not all information online is RELIABLE and true. Ask an adult if you are unsure.  SMART Rule – Keep passwords and other special information SAFE | This could be taught as a separate Life Skills lesson or as part of another ICT lesson.  Refer to the E-SMART rules. |