



## KS1 – Guide to Progression in Computing

|   | Year 1  | Year 2   |
|---|---|--|
| <b>Algorithms and Programs</b>          | Create a simple series of instructions – left, right, up/forwards, down/backwards.  | Predict the outcome(s) from a set of instructions.   |
|   | Plan and test a route with either a programmable toy or app                         | Plan, test and amend a set of instructions, using a wider variety of features, such as repeats and turns |
| <b>Data Retrieving and Organising</b>   | Capture images with a camera.   | Navigate a website to retrieve information and click appropriate links (knowing to avoid ads).           |
|   | Record sounds and play it back.   | Use shape tools to draw  |
| <b>Communicating (Digital Literacy)</b> | Begin to use a keyboard to type ideas.  | Type a simple piece of text.   |
|   | With support, print a page.   | Insert and delete a word using the mouse and arrow keys.   |
|   |   | Highlight text and change its format.  |
| <b>E-safety</b>                         | Use the search engines agreed by the school.  | Follow the school’s safer internet rules.  |
|   | Send and receive email as a class.  | Use the internet for learning and communicating with others in a safe way.                               |
|   | Recognise advertising on websites and learn to ignore it.                           | Use a password to access an account or secure network.   |
|   | Ask questions about what they see online, especially items that they are unsure of. | Tell someone if they find something inappropriate online or something they are unsure of.                |



## KS2 – Guide to Progression in Computing

|   | Year 3  | Year 4   | Year 5  | Year 6  |
|---|---|--|---|---|
| <b>Algorithms and Programs</b>                            | Experiment with programs to control models.   | Experiment with programs and make predictions to control a wider range of models       | Write programs with sequences and repetitions   | Detect errors in a program and correct and refine them, explaining their work                                     |
|   | Give an on-screen robot directional instructions  | Give specific instructions to go from one point to another                             | Combine sequences of instructions and procedures  | Explore 'what if' questions by planning different scenarios to test instructions                                  |
|   | Draw simple shapes on-screen using commands   | Draw regular shapes on-screen using commands using repeat instructions.                | Use ICT to measure and control external devices e.g. sensors.   | Use ICT to measure sound, light or temperature to trigger events and interpret the data                           |
| <b>Data Retrieving, Organising and using the Internet</b> | Review and delete images on a camera, and use editing software to crop photos and add effects | Capture images using device cameras and screen capture                                 | Capture and crop videos to the desired length.  | Add effects and edit both videos and still images   |
|   | Search for relevant images, copy and paste it into a document.                                | Use search engines effectively to find a specific webpage                              | Use a search engine using keyword searches and compare results of searches                                  | Complete complex searches using '+' 'OR' and inverted commas  |
|   | Copy and paste text into a document   | Use tabs, click on links and open web documents to enhance research skills             | Decide which sections of a webpage are needed and copy and paste into a document                            | Copy and paste relevant text from more than one web page  |
| <b>Communicating and Digital Literacy</b>                 | Send and receive emails with attachments  | Understand the benefits of ICT to send messages  | Use instant messaging and video chat to communicate   | Contribute to online discussions on a class page  |
|   | Create a simple presentation using more than one slide  | Create a presentation that is aimed at a specific audience                             | Use a range of presentation applications  | Create a multimedia presentation with audio and visual components   |
|   | Format text for a wider range of purposes: underline, centred, fonts.                         | Use the automatic spell checker to edit spellings                                      | Use bullets and numbering tools to improve presentation   | Confidently use a wide range of text formatting tools   |
|   | Save documents and other files to a relevant folder with a relevant title                     | Recognise a spreadsheet and how it can be used to make databases                       | Input information into a database or spread sheet.  | Input information to create database or spreadsheet, and create graphs based on the data                          |
| <b>E-safety</b>   | Be aware of the school's e-safety rules.  | Follow the school's e-safety rules.  | Know and follow the school's e-safety rules.  | Review and discuss the school's e-safety rules.   |
|   | Understand that copyright exists on images and other content on the internet.                 | Understand that some images and text are not permitted to be copied due to copyright.  | Reference information sources and understand copyright  | Know the difference between copying others' work (plagiarism) and presenting others' work in new and unique ways. |
|   | Begin to identify when emails should not be opened and when an attachment may not be safe.    | Explain how to use email safely  | Make safe choices about use of technology including passwords.  | Use technology thoughtfully to minimise personal risk, using appropriate tools and processes to stay safe         |
|   | Learn strategies to evaluate information, sorting fact and opinion                            | Use strategies to evaluate information, thinking about the source and author's intent. | Use knowledge of the meanings of different domains (e.g. .com, .gov, .org) to evaluate legitimacy of facts. | Use various strategies to find, evaluate and verify information.  |