|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Computing** | **EYFS** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** |
| **Problem Solving and Logical Thinking** | * Can children recognise that a range of technology is used in places such as homes and schools?
* Can they select and use technology for particular purposes?
 | * Can they create a simple series of instructions – left, and right?
* Can they record their routes? Do they understand forwards, backwards, up and down?
* Can they put two instructions together to control a programmable device?
 | * Can they predict the outcomes of a set of instructions?
* Can they program using sequences of instructions to implement an algorithm?
* Can you create an algorithm for your partner to debug?
* Can they test and amend a set of instructions?
 | * Can they experiment with variables to control models?
* Can they give an on-screen robot directional instructions (e.g. 90/45 degrees turns)
* Can they write more complex programs (leading to varying outcomes)?
* Do they understand input and output?
* Can they use commands to draw a shape (e.g., square, rectangle and other regular shapes on screen)?
 | * Can they use repeat instructions to draw regular shapes on screen on commands?
* Can they experiment with variables to control models?
* Can they make turns specifying the degrees?
* Can they make accurate predictions about the outcome of a program they have written?
* Can they give an on-screen robot takes them from x to y?
 | * Can they combine sequences of instructions and procedures to turn devices on or off?
* Do they understand input and output?
* Can they explore ‘What is’ questions by playing adventure or quest games?
* Can they plan a solution to a problem using decomposition (e.g., developing a computer game, creating a website)?
 | * Can they explain how an algorithm works?
* Can they detect errors in a program and correct them?
* Can they explore ‘what if’ questions by planning different scenarios for
* controlled devices?
* Can they use input from sensors to trigger events?
* Can design, write and debug their own computer control application?
 |
| **Creative Content** | * Can they create original content using digital technology?
* Can they use digital technology to store and retrieve content?

**E Safety*** Do they know that personal information should not be shared online?
* Can they act if they find something, they are unsure of (including identifying people who can help; minimizing screen; online reporting using school system etc.)?
 | * Can they find information on a website?
* Can they use a webpage as a resource?
* Can they experiment with drawing tools, text, pictures and animation to create content (e.g., presentation, eBook)?
* Can they create content (e.g., presentation, video, animation) in a small group and record the narration?

**E Safety*** Can they recognise advertising on websites and learn to ignore it?
* Can they begin to evaluate websites and know that everything on the internet is not true?
 | * Can they use editing software to manipulate media (e.g., crop, add effects, manipulate audio)?
* Can they manipulate sound?
* Can they combine text, images and sounds and show awareness of audience?

**E Safety*** Do they recognise the difference between the work of others which has been copied (plagiarism) and restructuring and re-presenting
* materials in ways which are unique and new?
 | * Can they capture images using a range of devices (e.g. webcam,
* screen capture, scanning, visualiser and internet)?
* Can they select media to download, import or export?
* Can they copy graphics from a range of sources and paste into a desktop
* publishing program?
* Can they insert media into a presentation (image, video, audio)?
* Do they know how to manipulate text, underline text, centre text, change font and size and save text to a folder?
* Can they create a presentation that is aimed at a specific audience?

**E Safety*** Can they recognise that cyber bullying is unacceptable and will be sanctioned in line with the school’s policy?
* Do they understand the need for caution when using an internet search for images and what to do if they find an unsuitable image?
 | * Can they listen, download, produce and upload a variety of broadcast media (e.g., livestreaming, podcast)
* Can they manipulate sounds using audio editing software (e.g., Audacity)?
* Can they select music from a variety of sources and incorporate it into multimedia presentations?
* Can they work on simple film editing?
* Can they use a range of presentation applications?
* Can they use technology to capture a range of multimedia?
* Can they make a home page for a website that contains links to other pages?
* Can they prepare and then present a simple film? (e.g., Storyboarding and then filming/editing).

**E Safety*** Can they independently, and with regard for e- safety, select and use appropriate
* communication tools to solve problems by
* collaborating and communicating with others within and beyond school?
* Do they understand they should not publish other people’s pictures or tag them on the internet without permission?
* Do they know that content put online is extremely difficult to remove?
 | * Can they explore the menu options and experiment with images?
* Can they add special effects to alter the appearance of a graphic?
* Can they ‘save as’ gif or jpeg. Wherever possible to make the file size smaller (for emailing or downloading)?
* Can they make an information poster using their graphics skills to good effect?
* Can they present a film / advert for a specific audience?
* Can they create a sophisticated multimedia presentation?

**E Safety*** Do they understand that some material on the internet is copyrighted and may not be copied or downloaded?
* Do they recognise the potential risks of using internet communication tools and understand how to minimize those risks (including scams and phishing)?
 |
| **Digital Literacy** | * Do they recognise the different forms of digital communication (e.g., emails address, twitter handle etc.)?
* Can they program using sequences of instructions to implement an algorithm?
* Can they understand the appropriate vocabulary according to equipment available?
* Can they develop awareness and use of keyboard layout and use navigation skills appropriately (e.g. backspace, enter, spacebar, mouse)?
 | * Can they communicate safely online (e.g., reply to email, respond to tweet)?
* Can they create, edit and format text (insert/delete words, use bold/italics/

underline)? | * Can they open and send an attachment?
* Can they find relevant information by browsing a menu?
* Can they search for an image, then copy and paste it into a document?
* Can they copy and paste text into a document?
* Do they know how to manipulate change font and size)?
* Can they save files (e.g., word doc, pictures) to an appropriate folder?
 | * Can they identify the benefits of ICT to send messages and to communicate?
* Can they use the automatic spell checker to edit spellings?
* Can they use a search engine to find a specific website?
* Do they know how to manipulate text (e.g., underline, text, centre, change font and size?
* Can they navigate using an internet browser (e.g., use tabbed browsing to open two or more web pages at the same time, open a link to a new window)?
 | * Can they conduct a video chat with someone?
* elsewhere in the school or in another school?
* Can they use bullets and numbering tools?
* Can they use a search engine using keyword searches?
* Can they compare the results of different searches?
* Can they download a document and save it to the computer?
* Can they decide which sections are appropriate to copy and paste from at least two web pages?
 | * Can they conduct a video chat with people in another organisation?
* Can they contribute to discussions online?
* Can they use a search engine using keyword searches?
* Can they confidently choose the correct page set up option when creating a document?
* Can they confidently use text formatting tools, including heading and body text?
* Can they use complex searches using sucha s ‘+’ ‘OR’” Find the phrase in inverted commas”?
 |