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|  | Nursery | Reception | Yr1/2 | Yr2/3 | Yr4/5 | Yr5/6 |
| Coding / Programming | Children have the opportunity to use devices such as the programmable mouse and play simple programming games on the iPad e.g. Hour of Code.  Children play physical games following step by step instructions and the word algorithm may be used by staff. | Children programme the Robot Mouse and Beebots on iPads.  Children practise giving instructions in a clear sequence (unplugged)  (Kapow EYFS schemes  All About Instructions & Programming Beebots)  Children use Hour of Code supported by Year 6 students.  Children play physical games following step by step instructions and the word algorithm may be used by staff. | Children can recognise cause and effect when pressing buttons on a Bee-Bot.  Discuss and demonstrate how the Bee-Bot works.  Record video ensuring everyone is in the shot.  Give a number of clear instructions in sequence.  Program a Bee-Bot to reach a destination.  Identify and correct mistakes in their programming.  Complete commands in a simple form of python and create and de-bug algorithms | Children can complete simple Programming in Scratch Junior: Growing, shrinking & moving a sprite, writing repeating sequences and adding sound. | Children use Scratch to improve their block coding skills and Turtle Logo to begin to use Python. | Children use Scratch to create games with if – then variables instructions, insets and forever loops.  Children use html and css to alter & programme a website.  Children use instructions in Python to create patterns. |
| Online Safety  & Digital Literacy | Children take part in Online Safety Day activities. Parents are encouraged to use technology alongside their children. Online safety themed books have been purchased. | As well as the expected outcomes for nursery children,  children also know how to search using an internet Browser.  Children are taught what to do if they see a video that scares them / makes them feel uncomfortable.  Children understand about passwords and the importance of remembering them and not sharing them.  Lessons from Project Evolve covering all strands to be taught in RHE lessons. | Lessons from Project Evolve covering all strands to be taught in RHE lessons.  Children are taught how to keep passwords safe and how to avoid strangers online.  They are reminded what to do if they see upsetting or hurtful content and we begin to look at kindness online. | Lessons from Project Evolve covering all strands to be taught in RHE lessons. | Lessons from Project Evolve covering all strands to be taught in RHE lessons. | Children create Stop Frame Animation Videos to teach Online Safety. Children are aware of the SMART acronym and what it stands for. Children are aware how to spot unreliable internet content including images that have been doctored. Children are aware how Search Engines find results and prioritise different websites.  Lessons from Project Evolve covering all strands to be taught in RHE lessons. |
| Computer Systems and Networks | As Reception where appropriate. | Children learn to identify inputs and outputs, technology around them and design their own computerised invention. | Children are taught about technology around them that is connected to the internet. They “journey” inside a computer and begin to learn the key components. | Children are taught about the school network and complete and local network safari. They learn about binary being the language of the computer. | Children are taught about the way the internet works, including the role of; packets, IP addresses and routers. | Children are taught about Data Centres, Internet cables and the journey of information across the world wide web. |
| Microsoft Office  (can be covered cross-curricular) | As Reception where appropriate. | Children might have the opportunity to try out Word alongside a Yr 6 student. | Children will learn basic word-processing skills through the Twinkl unit in cycle 1 and will begin to develop skills in Desktop Publishing through | As well as becoming more proficient in Word by adding images and using editing tools. Children will begin to use **Publisher** and add content to a template. Children can edit and reorder slides in a **PowerPoint** presentation. | Children can use Publisher to create posters, cards and basic leaflets.  Children can produce and deliver **PowerPoint p**resentations | Children use **Word** independently, being able to add images and tables where necessary.  Children can produce a tri-fold leaflet / newsletter (or other template) using **Publisher**.  Children can produce **PowerPoint** presentations with animations and hyperlinks.  Children are able to input Data into **Excel**, use formula to find totals and averages and use conditional formatting to highlight cells. Children will also display data as charts and graphs. |
| Multi-media presentation skills | As Reception where appropriate. | Children take photos using iPads and learn how to judge a successful photo including a selfie. | Children learn to use Paint  Children study digital imagery and use of lighting in photos.  Children can produce a guided Stop Frame Animation using Stop Motion. | Creating Music using images (Chrome Music Lab) | Children can edit photos.  Children can produce and edit an audio file.  Children learn the basics of Vector Drawing. | Children create Stop Frame Animation Videos using a variety of techniques and their own creativity to teach Online Safety.  Children practise skills in vector Drawing and 3D modelling. |
| Data Handling | As Reception where appropriate. | Children physically sort themselves into categories to begin to have an understanding of data handling. | Children use Jit 5 to produce pictograms. | Children use the idea of Top Trumps to create their own data base. | Children create flow diagrams to sort and analyse data. | Children use Microsoft Excel to handle topic related data and produce graphs, charts and formatted spread-sheets. |
| Keyboard skills | As Reception where appropriate. | Children work on identifying / finding letters on a keyboard. Clicking and dragging with a mouse. Double clicking. Single clicking and right clicking. | Children can type (this might be with just one hand at this stage) a basic word document and will learn shift for capital letters and be able to use both PCs and iPads. | Children become proficient in using the trackpad on the laptops and are beginning to use both hands at the keyboard. | Children use the number-pad and symbols available using the shift keys. Typing becomes more proficient. | Children can use some shortcut keys eg Ctrl + V for pasting and Ctrl + C for cutting. Children are aware of the Function keys and their purpose and some windows shortcuts especially Windows + printscreen. Children are beginning to type with two hands and have fluent and secure mouse control on PCs and Track Pads on Laptops too. |