Computing curriculum overview 2022-23

Term 1 - Tools for learning: desktop publishing with j2e5

Year 3	Year 4	Year 5	Year 6
Introduction to school network and j2e5; **Create calligrams page** ● Enter username and password ● Select items ● Click and drag ● Resize, rotate, reposition items ● Change effects ● Use tools ● Duplicate items ● Search for media within j2e ● Save ● Locate work	**Using j2e5 to create a book cover.** ● Y3 skills and... ● Attention to detail ● Choosing fonts ● Layering items **How do I search effectively?** ● Uses multiple keywords to search. ● Know some trusted websites on a range of topics ● Use tools to collect notes, eg mindmaps ● Search for file types, eg png ● Use questions	**Using j2e5 to create a book cover.** ● Attention to detail ● Use websites to generate content eg cooltext, inversion tool, create pngs ● Stretch images in j2e (shift-drag) **How do I search effectively?** ● Use CTRL-F to find words on a page ● Search for images marked for reuse ● Use Google search tools ● Reference websites used ● Upload and download images to/from Internet	**Using j2e5 to create a book cover.** ● Attention to detail ● Use websites to generate content eg cooltext, create pngs ● Stretch images in j2e (shift-drag) **How do I search effectively?** ● Use searching techniques, eg "" exact phrases, - to exclude.

Term 2 Programming 1: LOGO

Year 3	Year 4	Year 5	Year 6
Programming in LOGO ;JIT activities Letters ● Use arrows to control an onscreen object ● LOGO language - fd, bk, lt, rt, with numbers, reset, setpensize, colour ● Edit code, eg to change colours ● Test, modify and debug sample and own code. Computational thinking vocab **Hour of Code** ● Follow online instructions ● Complete coding challenges ● Use repeat, selection, sequence	**Create a Roman border in LOGO?** ● Type code ● Debug ● Follow instructions ● Check code carefully ● Use repeat and nested repeat ● Copy and understand example code ● Write code to draw intended shape Computational thinking vocab **Hour of Code** ● Follow online instructions ● Complete coding challenges ● Use repeat, selection, sequence	**How can I program in LOGO?** ● Use procedures and variables ● can use variables, inputs and broadcasting; can change own ideas into code ● Computational thinking vocab - barefoot Computational thinking vocab **Hour of Code** ● Follow online instructions ● Complete coding challenges ● Use repeat, selection, sequence	**How can I program in LOGO?** ● Use LOGO to plan and draw a picture with several elements ● Use a range of commands independently ● Use procedures and variables to design efficient code Computational thinking vocab **Hour of Code** ● Follow online instructions independently ● Complete coding challenges ● Use repeat, selection, sequence

Term 3 - Multimedia 1

Year 3	Year 4	Year 5	Year 6
Creating repeated page border and topic cover in j2e5 ● Select items ● Resize, rotate, reposition items ● Change effects ● Use editing tools ● Duplicate items ● Search for media within j2e ● Combine text and images ● Use different presentation tools ● Change elements, eg font, colour, size, position, rotate, crop ● Create frequency tables and graphs ● Use grid and snap tools **Safer Internet Week** ● Activities from SID22	**Using hyperlinks to create an adventure game in j2e5** ● Recap and practise Y3 skills and… ● Attention to detail ● Choosing fonts for a purpose ● Layering items ● Add pages ● Hyperlinks between files or pages of a document ● Include different elements, some chosen for appropriate effect ● Start to show attention to detail - lining up, consistent style; use group tool; planning eg storyboard **Safer Internet Week** ● Activities from SID22	**How do I create an effective presentation?** ● Recap and practise previous skills and... ● Attention to detail appropriate for Intended audience ● Use websites to generate content eg cooltext ● Eye of detail ● Use templates for leaflets and booklets ● Make deliberate, reasoned and appropriate choices of layout, style, media, transitions; accepting and offering advice **Safer Internet Week** ● Activities from SID22	**How to I create an effective WW2 style box?** ● Recap and practise previous skills and... ● Research 1940s boxes ● Use shape tools to explore and create nets ● producing polished work; critically evaluate own work to improve it DT skills: ● Cut, score and glue accurately ● Use craft knife and safety ruler safely ● Evaluate finished product **Safer Internet Week** ● Activities from SID22

Term 4 - Programming 2: Scratch

Year 3	Year 4	Year 5	Year 6
What is Scratch? How do I combine instructions? ● Combine blocks in Scratch, explore and experiment ● Copy and understand example code ● Test, modify and debug sample and own code.	**How do I make a Roman maze game in Scratch?** ● Use repeat, forever, if, then blocks. can explain in own words. ● Make sprites interact with each other and/or colour	**How do I make a rainforest game in Scratch?** ● Decompose a game into elements ● Code each element ● Use repetition, selection and variables	**How do I design and make my own game in Scratch?** ● Create own Scratch project. ● Independently debug more complex code

Term 5 - Data and networks

Year 3	Year 4	Year 5	Year 6
Create graphs and charts in j2e5 ● Create frequency tables and graphs ● (Enter data into a prepared spreadsheet,) create a graph and add a conclusion.	**Create mind maps and branching databases** ● Use and create branching databases to sort items ● Create mind maps so summarise, present and remember information	**How does information travel through networks?** ● Understand how Internet search engines work ● Understand how computers are linked through local and global networks ● Understand how information is sent	**Create and use databases** ● Use online spaces to collaborate and comment to enhance learning ● Interrogate a database to find information and patterns in data ● Create a database by defining fields and entering data

Term 6 - Multimedia 2

Year 3	Year 4	Year 5	Year 6
Create a stormy sea animation Music/Computing project ● Use drawing tools ● Understand animation ● Combine videos and music in iMovie	**How do I plan and create a class animation?** ● Work collaboratively as a class and in small groups to storyboard a class animation ● Make backdrops, characters and moving props ● Use iPads to capture images in animation app	**How do I create an interactive website?** ● Combine text, images, sound, video ● Create hyperlinks between pages ● Choose colours, layout, style carefully for effect	**How do I create a video tutorial/documentary video?** ● Use apps on iPad to capture video/audio ● Combine images, video and audio ● Choose styles and layouts carefully for effect