

Computing curriculum overview 2021-22

Term 1 - Tools for learning: desktop publishing with j2e5

Year 3	Year 4	Year 5	Year 6
<p>Introduction to school network and j2e5; Create calligrams page</p> <ul style="list-style-type: none"> • 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 	<p>Using j2e5 to create a book cover.</p> <ul style="list-style-type: none"> • Y3 skills and... • Attention to detail • Choosing fonts • Layering items <p>How do I search effectively?</p> <ul style="list-style-type: none"> • 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 	<p>Using j2e5 to create a book cover.</p> <ul style="list-style-type: none"> • Attention to detail • Use websites to generate content eg cooltext, inversion tool, create pngs • Stretch images in j2e (shift-drag) <p>How do I search effectively?</p> <ul style="list-style-type: none"> • 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 	<p>Using j2e5 to create a book cover.</p> <ul style="list-style-type: none"> • Attention to detail • Use websites to generate content eg cooltext, create pngs • Stretch images in j2e (shift-drag) <p>How do I search effectively?</p> <ul style="list-style-type: none"> • Use searching techniques, eg "" exact phrases, - to exclude.

Term 2 Programming 1: LOGO

Year 3	Year 4	Year 5	Year 6
<p>Programming in LOGO ;JIT activities Letters</p> <ul style="list-style-type: none"> • Use arrows to control an onscreen object • LOGO language - fd, bk, lt, rt, with numbers, reset, setpenseize, colour • Edit code, eg to change colours • Test, modify and debug sample and own code. <p>Computational thinking vocab</p> <p>Hour of Code</p> <ul style="list-style-type: none"> • Follow online instructions • Complete coding challenges • Use repeat, selection, sequence 	<p>Create a Roman border in LOGO?</p> <ul style="list-style-type: none"> • Type code • Debug • Follow instructions • Check code carefully • Use repeat and nested repeat • Copy and understand example code • Write code to draw intended shape <p>Computational thinking vocab</p> <p>Hour of Code</p> <ul style="list-style-type: none"> • Follow online instructions • Complete coding challenges • Use repeat, selection, sequence 	<p>How can I program in LOGO?</p> <ul style="list-style-type: none"> • Use procedures and variables • can use variables, inputs and broadcasting; can change own ideas into code • Computational thinking vocab - barefoot <p>Computational thinking vocab</p> <p>Hour of Code</p> <ul style="list-style-type: none"> • Follow online instructions • Complete coding challenges • Use repeat, selection, sequence 	<p>How can I program in LOGO?</p> <ul style="list-style-type: none"> • 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 <p>Computational thinking vocab</p> <p>Hour of Code</p> <ul style="list-style-type: none"> • Follow online instructions independently • Complete coding challenges • Use repeat, selection, sequence

Term 3 - Multimedia 1

Year 3	Year 4	Year 5	Year 6
<p>Creating repeated page border and topic cover in j2e5</p> <ul style="list-style-type: none"> ● 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 <p>Safer Internet Week</p> <ul style="list-style-type: none"> ● Activities from SID22 	<p>Using hyperlinks to create an adventure game in j2e5</p> <ul style="list-style-type: none"> ● 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 <p>Safer Internet Week</p> <ul style="list-style-type: none"> ● Activities from SID22 	<p>How do I create an effective presentation?</p> <ul style="list-style-type: none"> ● 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 <p>Safer Internet Week</p> <ul style="list-style-type: none"> ● Activities from SID22 	<p>How to I create an effective presentation??</p> <p>Google slides</p> <ul style="list-style-type: none"> ● Recap and practise previous skills and... ● Explore menus and features of a new tool ● Work collaboratively on a shared document ● Search for file types ● producing polished work; critically evaluate own work to improve it <p>Safer Internet Week</p> <ul style="list-style-type: none"> ● Activities from SID22

Term 4 - Programming 2: Scratch

Year 3	Year 4	Year 5	Year 6
<p>What is Scratch? How do I combine instructions?</p> <ul style="list-style-type: none"> ● Combine blocks in Scratch, explore and experiment ● Copy and understand example code ● Test, modify and debug sample and own code. 	<p>How do I make an Roman maze game in Scratch?</p> <ul style="list-style-type: none"> ● Use repeat, forever, if, then blocks. can explain in own words. ● Make sprites interact with each other and/or colour 	<p>How do I make a rainforest game in Scratch?</p> <ul style="list-style-type: none"> ● Decompose a game into elements ● Code each element ● Use repetition, selection and variables 	<p>How do I design and make my own game in Scratch?</p> <ul style="list-style-type: none"> ● Create own Scratch project. ● Independently debug more complex code

Term 5 - Data and networks

Year 3	Year 4	Year 5	Year 6
<p>Create graphs and charts in j2e5</p> <ul style="list-style-type: none"> • Create frequency tables and graphs • (Enter data into a prepared spreadsheet,) create a graph and add a conclusion. 	<p>Create mind maps and branching databases</p> <ul style="list-style-type: none"> • Use and create branching databases to sort items • Create mind maps so summarise, present and remember information 	<p>How does information travel through networks?</p> <ul style="list-style-type: none"> • Understand how Internet search engines work • Understand how computers are linked through local and global networks • Understand how information is sent 	<p>Create and use databases</p> <ul style="list-style-type: none"> • 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
<p>Create a stormy sea animation Music/Computing project</p> <ul style="list-style-type: none"> • Use drawing tools • Understand animation • Combine videos and music in iMovie 	<p>How do I plan and create a class animation?</p> <ul style="list-style-type: none"> • 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 	<p>How do I create an interactive website?</p> <ul style="list-style-type: none"> • Combine text, images, sound, video • Create hyperlinks between pages • Choose colours, layout, style carefully for effect 	<p>How do I create a video tutorial/documentary video?</p> <ul style="list-style-type: none"> • Use apps on iPad to capture video/audio • Combine images, video and audio • Choose styles and layouts carefully for effect