

Computing curriculum overview 2019-20

Term 1 - Tools for learning: desktop publishing with j2e5

| Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|--|
| <p>Introduction to our school network and j2e5. Create calligrams page Poster</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 • 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 • 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, setpsize, colour • Edit code, eg to change colours • Test, modify and debug sample and own code. <p>Computational thinking vocab - barefoot</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 - barefoot</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 - barefoot</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 • Computational thinking vocab - barefoot <p>Computational thinking vocab - barefoot</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 style="text-align: center;">Safer Internet Week</p> <ul style="list-style-type: none"> • Activities from SID20 | <p>Using hyperlinks to create an eBook 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 style="text-align: center;">Safer Internet Week</p> <ul style="list-style-type: none"> • Activities from SID20 | <p>How do I create an effective presentation?</p> <p>+music/greenscreen rainforest project</p> <p style="text-align: center;">Google docs</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 • Make deliberate, reasoned and appropriate choices of layout, style, media, transitions; accepting and offering advice <p style="text-align: center;">Safer Internet Week</p> <ul style="list-style-type: none"> • Activities from SID20 | <p>How to I create an effective presentation??</p> <p style="text-align: center;">Google slides</p> <ul style="list-style-type: none"> • Recap and practise previous skills and... • Y4+5 skills and... • Use advanced search • Search for file types • producing polished work; critically evaluate own work to improve it • can plan a questionnaire, set up a database eg google form and analyse results; can develop a simple spreadsheet model to explore a real life situation <p style="text-align: center;">Safer Internet Week</p> <ul style="list-style-type: none"> • Activities from SID20 |

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 Egyptian 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"> • Calculate score • Variables code. <p>Rainforest video Joint Computing/Music project</p> | <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 | <p>How do I create mind maps and branching databases?</p> <ul style="list-style-type: none"> • Enter data into a prepared spreadsheet, create a graph and add a conclusion. • Use and create branching databases • Use a prepared spreadsheet to investigate the effect of changing variables. | <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>How do I carry out a survey using Google forms?</p> <ul style="list-style-type: none"> • Use online spaces to collaborate and comment to enhance learning. |

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 |