

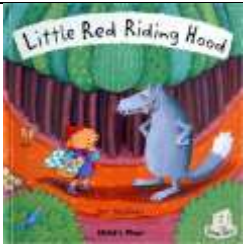

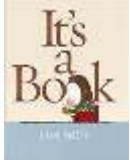
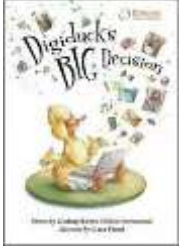


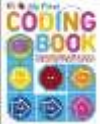




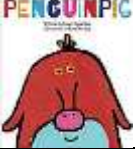
Cranford Park CE Primary School

Subject Overview for Computing

|            | Autumn 1  | Autumn 2   | Spring 1  | Spring 2  | Summer 1  | Summer 2  |
|------------|---|--|---|---|---|---|
|            | Title of unit<br>Main Objectives /Skills  | Title of unit<br>Main Objectives /Skills   | Title of unit<br>Main Objectives /Skills  | Title of unit<br>Main Objectives /Skills  | Title of unit<br>Main Objectives /Skills  | Title of unit<br>Main Objectives /Skills  |
| Year 1     | We are treasure hunters<br>Using programmable toys<br>Programming<br>Programmable toys                            | We are TV chefs<br>Filming a recipe<br>Computational thinking<br>Word/Movie<br>Maker/iMovie/Adobe<br>Premier Elements          | We are painters<br>Illustrating an eBook<br>Creativity<br>Tux Paint/Paint/2Paint/Word | We are collectors<br>Finding images using the<br>web<br>Computer networks<br>Internet<br>browser/PowerPoint or<br>IWB software                | We are storytellers<br>Producing a talking book<br>Communication/<br>Collaboration<br>PowerPoint/Photostory/Clicker 5 | We are celebrating<br>Creating a card electronically<br>Productivity<br>PowerPoint/Word/Clicker 5 |
| Vocabulary | algorithm<br>debug<br>instructions<br>predict<br>programming<br>robot<br>treasure                                 | algorithm<br>clip<br>edit<br>film<br>instructions<br>recipe<br>robot<br>video camera   | character<br>eBook<br>edit<br>illustration<br>traditional tale                        | algorithm<br>copyright<br>e-safety<br>mammal<br>permission<br>personal<br>private   | audio book<br>copyright<br>microphone<br>recording<br>sound effects<br>talking book                                   | celebrate<br>copyright<br>edit<br>greeting<br>keyboard<br>save<br>type                            |
| Key texts  | Smartie the Penguin – eBook<br> |    |    | Little Bird's Internet Security Adventure<br>             | It's a book by Lane Smith<br>     |               |
| Year 2     | We are astronauts<br>Programming on screen<br>Programming Scratch   | We are games testers<br>Exploring how computer<br>games<br>work<br>Computational thinking<br>Selection of free online<br>games | We are researchers<br>Researching a topic<br>Computer networks<br>/PowerPoint         | We are photographers<br>Taking, selecting and<br>editing<br>digital images<br>Creativity<br>Picasa/Pixelr/Picasa<br>Web/Photoshop<br>Elements | We are detectives<br>Communicating clues<br>Communication/<br>Collaboration<br>Email software/Word                    | We are zoologists   |

## Cranford Park CE Primary School

### Subject Overview for Computing

|                       |   |  |  |  |  |   |
|-----------------------|---|--|--|--|--|---|
|                       |   |  |  |  |  |   |
| <b>Key Vocabulary</b> | algorithm<br>instructions<br>predict<br>problem<br>program<br>robot<br>Scratch<br>sprite                                    | algorithm<br>predict<br>rules<br>Scratch<br>test   | Google<br>mind map<br>presentation<br>research<br>search<br>search engine                                      | camera<br>image<br>Picasa<br>pixel<br>portfolio<br>theme   | address<br>attachment<br>database<br>evidence<br>email<br>fact file<br>header<br>safety  | chart<br>classification key<br>data<br>database<br>photograph<br>tally chart<br>tick chart  |
|                       | My First Coding Book by Kiki Prottzman<br> |                               |                              |   |   | Penguinpig by Stuart Spendlow and Amy Bradle<br> |
| <b>Year 3</b>         | <b>We are programmers</b><br>Programming an animation<br>Programming<br>Scratch/Snap!/PowerPoint                            | <b>We are presenters</b><br>Videoing performance<br>Creativity<br>Movie Maker/Adobe<br>Premier Elements/iMovie | <b>We are bug fixers</b><br>Finding and correcting bugs in programs<br>Computational thinking<br>Scratch/Snap! | <b>We are network engineers</b><br>Exploring computer networks, including the internet<br>Computer networks<br>Access to school network and command prompt | <b>We are communicators</b><br>Communicating safely on the internet<br>Communication/ Collaboration<br>Email software/Video conferencing software/webcam | <b>We are opinion pollsters</b><br>Collecting and analysing data<br>Productivity<br>Excel/InspireData/Google Drive                  |
| <b>Key Vocabulary</b> | algorithm<br>animation<br>input<br>output<br>program<br>script<br>storyboard  | audio<br>close-up<br>editing<br>footage<br>panning<br>shooting<br>video camera<br>zooming                      | algorithm<br>bugs<br>debug<br>instruction<br>program<br>script   | command prompt<br>internet<br>IP address<br>network<br>packet of data<br>ping<br>router<br>wi-fi   | attachment<br>email<br>e-safety<br>spam<br>spoofed link<br>video conference<br>virus   | chart<br>data<br>graph<br>opinion<br>questions<br>rating scale<br>research<br>survey  |



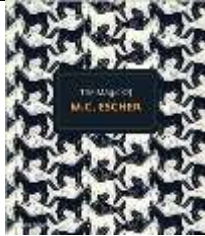

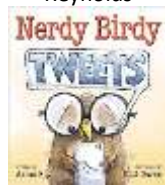

## Cranford Park CE Primary School

### Subject Overview for Computing

|                       |   |   |   |  |   |   |
|-----------------------|---|---|---|--|---|---|
|                       | <p>Why are there different computing languages? By Kirsty Homes</p>  | <p>Knights and Bikes by Gabrielle Kent &amp; Rex Crowle</p>  | <p>Glitch Sarah Graley</p>                  | <p>Look Inside How Computers Work</p>                         | <p>Webster's Email by Hannah Whaley</p>          |    |
| <b>Year 4</b>         | <p><b>We are software developers</b><br/>Developing a simple educational game<br/>Programming<br/>Scratch/2DIY/Snap!</p>                              | <p><b>We are musicians</b><br/>Producing digital music<br/>Creativity<br/>JamStudio/GarageBand/Audacity/LMMS</p>                              | <p><b>We are authors</b><br/>Creating a story<br/>Communication/Collaboration</p>   | <p><b>We are toy designers</b><br/>Prototyping an interactive toy<br/>Computational thinking<br/>Arduino/Lego WeDo/Scratch</p>                   | <p><b>We are meteorologists</b><br/>Presenting the weather<br/>Productivity<br/>Excel/Google Drive/PowerPoint/IWB Software</p>      | <p><b>We are HTML editors</b><br/>Editing and writing HTML<br/>Computer networks<br/>Brackets/Notepad/Kompozer</p>                        |
| <b>Key Vocabulary</b> | <p>debug<br/>input<br/>interface<br/>output<br/>program<br/>prototype<br/>repetition<br/>variable</p>   | <p>audio<br/>composition<br/>copyright<br/>digital<br/>instruments<br/>pitch<br/>sample<br/>sequencing<br/>software</p>                       | <p>edit<br/>audience<br/>copyright<br/>text<br/>image<br/>sound<br/>entertain<br/>E-Safety</p>                                | <p>algorithm<br/>debug<br/>input<br/>interactive<br/>output<br/>pitch<br/>prototype<br/>simulation</p>   | <p>chart<br/>data-logging<br/>forecast<br/>graph<br/>measurement<br/>prediction<br/>spreadsheet<br/>temperature</p>                 | <p>code<br/>HTML<br/>HTTP (hyper text transfer protocol)<br/>hyperlink<br/>tag<br/>URL<br/>web page</p>                                   |
|                       | <p>Agent Asha: Mission Shark Bytes by Sophie Deen</p>              | <p>In the key of code by Aimee Lucido</p>                  | <p>Staying Safe Online Louie Stowell</p>  | <p>The Person Controller David Baddiel &amp; Jim Field</p>  | <p>The Weather Girls by AKI Delphine Mach</p>  | <p>Tek the Modern Cave Boy by Patrick McDonnell</p>  |
| <b>Year 5</b>         | <p><b>We are game developers</b><br/>Developing an interactive game<br/>Programming<br/>Scratch/2DIY/Snap!/Kodu</p>                                   | <p><b>We are cryptographers</b><br/>Cracking codes<br/>Computational thinking<br/>Scratch/Snap!/Excel</p>                                     | <p><b>We are artists</b><br/>Fusing geometry and art<br/>Creativity<br/>Scratch/Inkscape/Illustrator</p>                      | <p><b>We are web developers</b><br/>Creating a web page about cyber safety</p>   | <p><b>We are bloggers</b><br/>Sharing experiences and opinions<br/>Communication/</p>   | <p><b>We are architects</b><br/>Creating a virtual space<br/>Productivity<br/>SketchUp/Picasa Web</p>                                     |


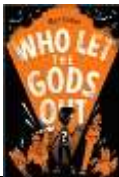



## Cranford Park CE Primary School

### Subject Overview for Computing

|               |   |   |  |   |  |   |
|---------------|---|---|--|---|--|---|
|               |   |   |  | Computer networks<br>Google<br>Sites/PBWorks/MediaWiki  | Collaboration<br>Wordpress/Blogger   |   |
|               | Algorithm<br>debugging<br>code<br>programming<br>sprites<br>storyboard<br>repetition<br>variables                               | binary code<br>cypher<br>decrypt<br>encrypt<br>Morse code<br>password<br>security<br>semaphore                          | geometric<br>landscape<br>op art<br>sprite<br>symmetry<br>tessellations  | bias<br>e-safety<br>Page Rank<br>revision history<br>search engine<br>Wiki  | audience<br>blog<br>blogroll<br>copyright<br>dashboard<br>hyperlinks<br>podcast  | 3D<br>animation<br>gallery<br>navigation<br>screencast<br>sculpture<br>virtual                                      |
|               | Ant Clancy: Games Detective<br>Ruth Morgan<br> | The Secret Breakers by H.L. Dennis<br> |    | Hacker<br>Malorie Blackman<br> | Nerdy Bird Tweets by Aaron Reynolds<br> |                                  |
| <b>Year 6</b> | <b>We are movie makers</b><br>Creating a WW2 documentary<br>Computer networks App<br>Inventor/App<br>Shed/Codea/PhoneGap        | <b>We are programmers</b><br>Programming an animation<br>Programming<br>Scratch   | <b>We are presenters</b><br>Researching and presenting ideas on PowerPoint about the Ancient Greeks<br>Communication/Collaboration<br>PowerPoint | <b>We are analysers</b><br>Using spreadsheets<br>Productivity<br>Excel  | <b>We are coders</b><br>Using Kodu<br>Computational thinking<br>Kodu   | <b>We are animators</b><br>Using StopGo animation to create an ESafety video.<br>Creativity<br>StopGo App on iPad   |
|               | Storyboard<br>documentary<br>film<br>production<br>pre-production<br>post-production<br>copyright<br>source<br>shots<br>scene   | Algorithm<br>debugging<br>code<br>programming<br>sprites<br>storyboard<br>repetition<br>variables<br>broadcast          | slides<br>transition<br>effects<br>import<br>hyperlinks<br>copyright<br>images<br>sounds<br>slideshow<br>design                                  | spreadsheet<br>cell<br>row<br>column<br>formula<br>calculate<br>format<br>edit<br>insert<br>ascending             | world<br>smooth<br>flatten<br>raise<br>program<br>environment<br>acceleration<br>bump<br>obstacle<br>track                 | animation<br>storyboard<br>scene<br>shoot<br>audience<br>E-safety<br>upload<br>convert<br>copyright<br>aspect ratio |

Cranford Park CE Primary School

Subject Overview for Computing

|  |   |   |  |  |   |  |
|--|---|---|--|--|---|--|
|  | script<br>sound effects<br>angle<br>frame   |   | template<br>layouts<br>schemes   | descending<br>sort<br>graph  | path<br>node<br>tool palette  | cast<br>frames per second<br>exposure<br>onion skin  |
|  |  |  | Who Let the God's Out by Maz Evans<br> | The Technology Tail by Julia Cook<br> |  | Dot.Common Sense by Ben Hubbard<br> |