**CJS Computing overview**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Autumn** | **Spring**  | **Summer** |
| **Year 3** | E-safety (2-3 hours) How do I use the different software and hardware at Courthouse?How do I stay safe using different software and hardware at Courthouse?How to identify online dangers?Scratch Programming (3-4 hours) - ilearn2How do I write a simple program with text outputs, wait commands and movement?How do I write a program with movement and repetition?How do I write programs using different inputs; keyboard, mouse and touch screen?Comic creation ilearn2 (3-4 hours) - ilearn2What can I do to add, resize and organise colour or picture backgrounds?How do I add, resize, organise characters/object to different panels and add narration using text and direct speech using speech bubbles? | Digital Art (3-4 hours) - *ilearn2*How do I use stamps to build graphics and copy and paste to speed up?How can I use different shapes and label them with text?How can I use select, copy and paste to duplicate elements?How can I transform elements to create patterns and symmetry?Document Editing (1-2 hours) - *ilearn2*How can I edit documents to find and replace and format texts?How do I edit and transform images?How can I learn to touch type?(2-3 hours) A day in the life of a Year 3 at CourthouseHow to write a blog about a day in the life of a Year 3 at Courthouse?Typing- BBC Dancemat (2-3 hours) | Kodu Programming (6-8 hours)- *ilearn2*How do I create a 3d place using various design tools?How do I write a program to control using keyboard inputs?How do I write a program with conditions?How do I write a program with variables?Game Creation (3-4 hours) - *ilearn2*How do I design and animate backgrounds?How do I design and add characters or objects?How do I design and add platforms?How do I create an app store listing with an effective description and screen shots?Digital Music - First 2 Activities (1-2 Hours) - *ilearn2*How to create scales, chords, arpeggios, melodies and rhythm to build a song?How to build up a mix using sampled sounds? |
| Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy |
| **Year 4** |  Scratch Programming - Lessons 3-6 (3-4 hours)How to program inputs with loops and use conditions for sensing and interactions?How to write programs with audio outputs and inputs?How to debug a variety of programs?How to program conditions with data variables and operators?Animation (3-5 hours) - ilearn2How do I create a stop motion video by duplicating slides/frames?How do I create animation effects?How to create animated GIF files by animating pixels?E-safety (1-2 hours)How to understand how we communicate and share content online safely and respectfully?Typing- BBC Dancemat (2-3 hours)  | Data Handling - First 3 activities (3-4 hours) - ilearn2How to select cells and resize them with colour and borders?How to find and present data in a table or suitable chart?How to give a chart a title, subtitle and label axis?Internet Research - First 3 tasks (2-3 hours) - ilearn2How to use search technologies to find specific pieces of information?How to reference the correct source of information?E-book Creation (3-4 hours) - ilearn2How to add page colour and style then position and format the text?How to add and position images from cameras/internet?How to add audio hiding behind an object?How to add hyperlinks to text and images?How to add and format shapes?3D Design (2-3 hours) - *ilearn2*To understand 3d spacial awarenessHow to add 3d shapes, resize, adjust and duplicate to a different perspective?How to re-create different type of buildings using 3d shapes | Digital media Create a stop motion animation (Pivot)How to create a stop-motion video by duplicating frames/slides?How to create animation using transition?How to animate individual elements and GIFs?App Design (2-3 hours) - ilearn2How to adjust slide size to mimic a phone/table size?How to add text and images to a slide?How to add icons and text to use as navigation?How to duplicate slides to create multiple pages on an appVideo Editing- 4 hoursHow to add clips then order and resize them?How to add titles to clips and change themes?How to add voiceovers and music?How to add filters and clips?How to export a project? |
|  | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy |
| **Year 5** | Scratch Programming - Lessons 4-8(3-5 hours) - ilearn2How to program list variables that chooses randomly (Scratch sentences)?How to program inputs, conditions and sensing for interaction, data variables and scoring (Scratch maze)?How to program inputs, outputs, loops, conditions, sensing and variables (Scratch football)?Music Creation - Activities 3 & 4 (2 hours) - ilearn2How to edit sampled music with code by changing variables and using loops?How to layer sounds to create multi track music and add effects?How to build tracks of music using virtual instruments and adjust levels and effects of each track?Data Handling -Tour De France Project (2-3 hours) - ilearn2How to find data from the internet (Google maps)?How to find and present data as a table and suitable chart?Typing- BBC Dancemat (2-3 hours) | Text based programming (4-5 hours) - iLearn2How to change the variables of text-based commands?How to write text based commands?How to write text-based commands to program digital art?Computer Networks (2-3 hours) - ilearn2How to understand computer networks, internet and cloud computing?What is email and how can it be used safely?How and why can we collaborate online?E-Safety UKS2 iLearn2 1-4To understand how to keep personal information private?How to respect and protect against online bullies?What happens when I share a photo or video online?Physical Systems (2-3 hours) - ilearn2To understand how computers use physical inputs and outputs and give examples?To program physical inputs and outputs (LED system?) | Ebook Creation (3-4 hours) - ilearn2How to add colour and styles then position to format texts?How to add position and images from a camera or the internet?How to add audio including hiding it behind an object?How to add hyperlinks and texts to images?3D Design (2-3 hours) - ilearn2How to understand 3d spatial awareness?How to add 3d shapes, resize, adjust height, duplicate and use different perspective?How to re-create different types of 3d buildings?How to create roads and baths by adjusting the height of 3d shapes? |
|  | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy |
| **Year 6** | History of Computers (1-3 hours) - ilearn2How to design and create digital content to accomplish goals?How to use search technologies effectively and be discerning in evaluating digital content?How to understand technology has changed over time and combine texts and images to present ideas?Understand the positive and negative impacts technology has on society?Predict how technology will change in the future?Web design (4-6 hours) - ilearn2How to add and format text within a website?How to organise sections of a web page and multiple pages with relevant titles?How to add and edit images within a web page?How to include other features such as hyperlinks, buttons and files?How to evaluate other websites and provide constructive feedback, changing where necessary? | HTML Web Programming (4-6 hours) - ilearn2How to add and align text and change colours?How to program background colours?How to add and align images?How to add and use hyperlinks and use them effectively to build navigation between different pages and external sites?How to add an I-frame (such as Google maps) and adjust the height and width?Programming in Python language (1-2 hours) - ilearn2How to program movements using Python Turtle?How to use the PRINT command for texts?How to program a simple calculator in Python?How to program loops and repeat texts?Binary Code (1-2 hours) - ilearn2How to understand why computers/electronics use binary?How to convert binary code to denary numbers (decimal numbers) and visa versa? | E-Safety UKS2 lessons 4-7What does the term digital footprint mean?How to know if content is trustworthy?How who, where and how I can report things to online?What are the pitfalls in in-app purchases?Virtual Reality (3+ hours) - ilearn2How to understand what virtual realist is and how it can used to help people?How to add, move and resize objects in a virtual reality?How to animate objects for realism?How to use code blocks to add movement with groupings and interaction conditions?How to create multiple scenes of VR environments?Image Editing (1-3 hours) - ilearn2How to take and crop screenshots and understand ratios?How to adjust the colours, brightness and contrast by using filters?How to add drawing and text layers?How to import new images as layers and resize/add effects?How to save finished images to use in other projects? |
|  | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy | Computer Science | Information Technology | Digital Literacy |