

Year 8 KS3 Computer Science

Week Beginning	Unit	Lesson	Notes
26-Aug	Introduction, OneDrive and Printers	0	<ul style="list-style-type: none"> - Students can all login to OneDrive - Students have arrange their OneDrive in a meaningful way - Students can all save, recover and share files from OneDrive - Students are aware of how to use the school printers (and where to gain support if they need more help)
02-Sep	8.1 Using media – Gaining support for a cause	1	<ul style="list-style-type: none"> - Apply the key features of a word processor to format a document - Evaluate formatting techniques to understand why we format documents - Identify the key features of a word processor - Select the most appropriate software to use to complete a task
09-Sep	8.1 Using media – Gaining support for a cause	2	<ul style="list-style-type: none"> - Apply appropriate formatting techniques - Demonstrate an understanding of licensing issues involving online content by applying appropriate Creative Commons licences - Demonstrate the ability to credit the original source of an image - Select appropriate images for a given context
16-Sep	8.1 Using media – Gaining support for a cause	3	<ul style="list-style-type: none"> - Apply techniques in order to identify whether or not a source is credible - Critique digital content for credibility
23-Sep	8.1 Using media – Gaining support for a cause	4	<ul style="list-style-type: none"> - Apply referencing techniques and understand the concept of plagiarism - Evaluate online sources for use in own work
30-Sep	8.1 Using media – Gaining support for a cause	5	<ul style="list-style-type: none"> - Apply referencing techniques that credit authors appropriately - Construct a blog using appropriate software - Design the layout of the content to make it suitable for the audience - Organise the content of the blog based on credible sources
07-Oct	8.1 Using media – Gaining support for a cause	6	<ul style="list-style-type: none"> - Apply referencing techniques that credit authors appropriately - Construct a blog using appropriate software - Design the layout of the content to make it suitable for the audience - Organise the content of blog based on credible sources
14-Oct	School holiday		
21-Oct	Explore/Play(Contingency)		
28-Oct	8.1 Using media – Gaining support for a cause		8.1 Assessment
04-Nov	Explore/Play(Contingency)		
11-Nov	Explore/Play(Contingency)		
18-Nov	8.2 Media – Vector graphics	1	<ul style="list-style-type: none"> - Draw basic shapes (rectangle, ellipse, polygon, star) with different properties (fill and stroke, shape-specific attributes) - Manipulate individual objects (select, move, resize, rotate, duplicate, flip, z-order) - Combine paths by applying operations (union, difference, intersection)
25-Nov	8.2 Media – Vector graphics	2	<ul style="list-style-type: none"> - Manipulate groups of objects (select, group/ungroup, align, distribute) - Convert objects to paths - Draw paths - Edit path nodes
02-Dec	8.2 Media – Vector graphics	3	
09-Dec	8.2 Media – Vector graphics	4	<ul style="list-style-type: none"> - Combine multiple tools and techniques to create a vector graphic design
16-Dec	School holiday		
23-Dec	School holiday		
30-Dec	School holiday		
06-Jan	8.2 Media – Vector graphics	5	<ul style="list-style-type: none"> - Explain what vector graphics are - Provide examples where using vector graphics would be appropriate - Complete a summative assessment - Improve your own project work based on feedback
13-Jan	8.2 Media – Vector graphics	6	<ul style="list-style-type: none"> - Peer assess another pair's project work
20-Jan	8.2 Media – Vector graphics		8.2 Assessment
27-Jan	Explore/Play(Contingency)		
03-Feb	Explore/Play(Contingency)		
10-Feb	Explore/Play(Contingency)		Monday, Tuesday & Wednesday are school holidays
17-Feb	8.3 Layers of computing systems	1	<ul style="list-style-type: none"> - Explain the difference between a general-purpose computing system and a purpose-built device - Recall that a general-purpose computing system is a device for executing programs - Recall that a program is a sequence of instructions that specify operations that are to be performed on data
24-Feb	8.3 Layers of computing systems	2	<ul style="list-style-type: none"> - Describe how the hardware components used in computing systems work together in order to execute programs - Describe the function of the hardware components used in computing systems - Recall that all computing systems, regardless of form, have a similar structure ('architecture')
03-Mar	8.3 Layers of computing systems	3	<ul style="list-style-type: none"> - Analyse how the hardware components used in computing systems work together in order to execute programs - Define what an operating system is, and recall its role in controlling program execution
10-Mar	8.3 Layers of computing systems	4	<ul style="list-style-type: none"> - Describe how hardware is built out of increasingly complex logic circuits - Describe the NOT, AND, and OR logical operators, and how they are used to form logical expressions - Recall that, since hardware is built out of logic circuits, data and instructions alike need to be represented using binary digits - Use logic gates to construct logic circuits, and associate these with logical operators and expressions
17-Mar	8.3 Layers of computing systems	5	<ul style="list-style-type: none"> - Associate the use of artificial intelligence with moral dilemmas - Describe how machine learning differs from traditional programming - Describe the steps involved in training machines to perform tasks (gathering data, training, testing) - Identify examples of artificial intelligence and machine learning in the real world - Provide broad definitions of 'artificial intelligence' and 'machine learning'
24-Mar	School holiday		
31-Mar	School holiday		
07-Apr	8.3 Layers of computing systems	6	<ul style="list-style-type: none"> - Explain the implications of sharing program code
14-Apr	8.3 Layers of computing systems		8.3 Assessment
21-Apr	Explore/Play(Contingency)		
28-Apr	8.4 Developing for the Web	1	<ul style="list-style-type: none"> - Describe what HTML is - Modify HTML tags using inline styling to improve the appearance of web pages - Use HTML to structure static web pages - Apply HTML tags to construct a web page structure from a provided design
05-May	8.4 Developing for the Web	2	<ul style="list-style-type: none"> - Display images within a web page - Assess the benefits of using CSS to style pages instead of in-line formatting - Describe what CSS is - Use CSS to style static web pages
12-May	8.4 Developing for the Web	3	<ul style="list-style-type: none"> - Analyse how search engines select and rank results when searches are made - Describe what a search engine is - Explain how search engines 'crawl' through the World Wide Web and how they select and rank results
19-May	8.4 Developing for the Web	4	<ul style="list-style-type: none"> - Create hyperlinks to allow users to navigate between multiple web pages - Discuss the impact of search technologies and the issues that arise by the way they function and the way they are used - Use search technologies effectively
26-May	8.4 Developing for the Web	5	<ul style="list-style-type: none"> - Complete summative assessment - Implement navigation to complete a functioning website
02-Jun	8.4 Developing for the Web	6	
09-Jun	8.4 Developing for the Web		8.4 Assessment
16-Jun	Explore/Play(Contingency)		
23-Jun	Explore/Play(Contingency)		School finishes on Wednesday (Thursday Islamic holiday)