



Year 6 - Year Group Overview Computing

Year 6	
Online Safety (Using Project Evolve)	Self-Image and Identity I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online. I can describe issues online that could make anyone feel sad, worried, uncomfortable or frightened. I know and can give examples of how to get help, both on and offline. I can explain the importance of asking until I get the help needed. Online Relationships I can explain how sharing something online may have an impact either positively or negatively. I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not. I can describe how things shared privately online can have unintended consequences for others. e.g. screen-grabs. I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this. Online Reputation I can explain the ways in which anyone can develop a positive online reputation. I can explain strategies anyone can use to protect their 'digital personality' and online reputation, including degrees of anonymity. Online Bullying I can describe how to capture bullying content as evidence (e.g screen-grab, URL, profile) to share with others who can help me. I can explain how someone would report online bullying in different contexts. Managing Online Information I can explain how search engines work and how results are selected and ranked. I can explain how to use search technologies effectively. I can describe how some online information can be opinion and can offer examples. I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news). I understand the concept of persuasive design and how it can be used to influences peoples' choices. I can demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important. I can explain how companies and news providers target people with online news stories they are more likely to engage with and how to recognise this

I can describe the difference between online misinformation and dis-information. I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation or disinformation). I can identify, flag and report inappropriate content. Health, Well-being and Lifestyle I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this. I can recognise features of persuasive design and how they are used to keep users engaged (current and future use). I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise). Privacy and Security I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser). I can explain what to do if a password is shared, lost or stolen. I can describe how and why people should keep their software and apps up to date, e.g. auto updates. I can describe simple ways to increase privacy on apps and services that provide privacy settings. I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing). I know that online services have terms and conditions that govern their use. Copyright and Ownership I can demonstrate the use of search tools to find and access online content which can be reused by others. I can demonstrate how to make references to and acknowledge sources I have used from the internet.			
Year 6	Declarative		Procedural
Autumn 1 Computing Systems and Networks	Communication and collaboration	To recognise that data is transferred across networks using agreed protocols (methods) To recognise that connections between computers allow access to shared stored files To explain that data is transferred in packets To recognise computers connected to the internet allow people in different places to work together To discuss the opportunities that technology offers for communication and collaboration To explain which types of media can be shared through the internet To explain that communicating and collaboration using the internet can be public or private	To outline methods of communicating and collaborating using the internet To choose methods of internet communication and collaboration for given purposes To evaluate different methods of online communication and collaboration To decide what you should and should not share online
Autumn 2 Creating Media	Web page creation	To recognise the relationship between HTML and visual display To recognise that web pages can contain different media types To recognise that web pages are written by people To recognise that a website is a set of hyperlinked web pages	To review an existing website (navigation bars, header) To create a new blank web page To add text to a webpage

		To recognise components of a web page layout To consider the ownership and use of images (copyright) To recognise the need to preview pages (different screens/devices) To recognise the need for a navigation path To recognise the implications of linking ot content owned by others	To set the style of text on a web page To change the appearance of text To embed media in a web page To add web pages to a website To preview a web page (different screen sizes) To insert hyperlinks between pages To insert hyperlinks to another site
Spring 1 Programming A	Variables in games	To define a 'variable' as something that is changeable To identify examples of information that is variable, for example, a football score during a match To explain that a variable can be used in a program e.g. score To define a program variable as a placeholder in memory for a single value To explain that a variable has a name and a value To recognise that the value of a variable can be used by a program To recognise that the value of a variable can be updated To identify that variables can hold numbers (integers) or letters (strings) To define the way that a variable is changed To recognise that a variable can be set as a constant (fixed variable) To explain the importance of setting up a variable at the start of a program (initialisation) To explain that there is only one value for a variable at any one time To explain that if you change the value of a variable, you cannot access the previous value (cannot undo) To explain that if you read a variable, the value remains To explain that the name of a variable is meaningless to the computer To explain that the name of a variable needs to be unique	To identify a variable in an existing program To experiment with the value of an existing variable To choose a name that identifies the role of a carriable to make it easier for humans to understand it To decide where in a program to set a variable To update a variable with a user input To use an event in a program to update a variable To use a variable in a conditional statement to control the flow of a program To use the same variable in more than one location in a program
Spring 2 Data and Information	Introduction to Spreadsheets	To identify questions that can be answered using spreadsheet data To explain what an item of data is in a spreadsheet To explain how the data type determines how a spreadsheet can process the data	To calculate data using a formula for each operation To use functions to create new data To use existing cells within a formula

		To outline that there are different software tools to work with data To explain that formula can be used to produce calculated data To recognise cells can be linked To explain why data should be organised in a spreadsheet To recognise that a cell's value automatically updates when the value in a linked cell is changed To evaluate results in comparison to the question asked	To choose suitable ways to present spreadsheet data
Summer 1 Creating Media	3D Modelling	To explain that 3D models can be created on a computer To recognise that a 3D environment can be viewed from different perspectives To recognise that digital tools can be used to manipulate 3D objects To show how placeholders create holes in 3D objects To recognise that artefacts can be broken down into a collection of 3D objects	To position 3D shapes relative to one another To use digital tools to modify 3D objects To combine objects to create 3D digital artefacts To use digital tools to accurately size 3D objects To construct a 3D model which reflects a real world object
Summer 2 Programming B	Sensing Movement	To define a 'variable' as something that is changeable To identify examples of information that is variable, for example, a football score during a match To explain that a variable can be used in a program e.g. score To define a program variable as a placeholder in memory for a single value To explain that a variable has a name and a value To recognise that the value of a variable can be used by a program To recognise that the value of a variable can be updated To identify that variables can hold numbers (integers) or letters (strings) To define the way that a variable is changed To recognise that a variable can be set as a constant (fixed variable) To explain the importance of setting up a variable at the start of a program (initialisation) To explain that there is only one value for a variable at any one time To explain that if you change the value of a variable, you cannot access the previous value (cannot undo) To explain that if you read a variable, the value remains	To identify a variable in an existing program To experiment with the value of an existing variable To choose a name that identifies the role of a variable to make it easier for humans to understand it To decide where in a program to set a variable To update a variable with a user input To use an event in a program to update a variable To use a variable in a conditional statement to control the flow of a program To use the same variable in more than one location in a program

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