

Subject: Computing **Year** 9 **Ability** Mixed

	Unit 4	Unit 5	Unit 6
Topic	Advanced Spreadsheets	Designing Websites	Spreadsheet Project
Topic overview Pupils will learn...	Explore a range of complex spreadsheets tools and develop the knowledge needed to collect accurate data and automate processes to meet the needs of specific users	Explore the relationship between the component parts of webpages and design a functioning website	Combine a range of IT knowledge to design a digital product that meets a specific brief, focused on predicting and modelling data
Components	<ul style="list-style-type: none"> Know and understand the structure and use of a range of more advanced functions of spreadsheets in order to embed skills developed within introducing spreadsheets, and develop complex skills needed in the world of work. Understand how to use validation to create drop-down lists, use validation within spreadsheets to automate aspects of spreadsheets in order to develop accurate solutions for inputting data. Identify the most appropriate functions to use in order to develop spreadsheets for a particular purpose. Plan creative solutions to problems and design spreadsheets for a range of purposes making use of a range of more advanced functions. Develop confident and responsible use of modern information to interpret data from spreadsheets in order to embed knowledge needed to access a range of IT based careers 	<ul style="list-style-type: none"> Identify key features and content of a webpage and website in order to design and plan a website for a specific purpose and audience Explore the links between HTML (to layout a page) and CSS (to format content) in order to recognise the role played by each in web design Embed an image into an HTML document, create hyperlinks to an external web page, link pages of a website together, use an image as a clickable hyperlink and create and style a navigation bar in order to add media-rich content, similar to real-life websites Edit an external style sheet in order to control the styling of an HTML document in order to adjust the styling to control the layout and appearance of a web page. plan the content, create a site plan, design the web page layout and define the styling for a website in a style sheet in order to replicate the processes carried out by real-world web designers Develop a website about a specific hobby or interest, having used the design cycle to plan, build, review and improve it successfully 	<ul style="list-style-type: none"> Identify a real-world application for a spreadsheet system (purpose and audience) Determine a set of data to be captured by a system, and methods of modelling data Identify and utilise spreadsheet knowledge from previous units that can be used to achieve specific aims Use the design cycle to plan, develop, test and evaluate a digital product
What pupils should already know (Prior learning components)	<p>From Unit 3 of Computing Year 8, students should have been taught to –</p> <ul style="list-style-type: none"> explore the real-world application of spreadsheets in order to understand how software is used to capture and model data for a range of purposes Identify a range of functions that can be used to perform arithmetic and logical operations <p>From KS3 Mathematics, students have been taught to –</p> <ul style="list-style-type: none"> Carry out arithmetic operations Identify logical comparisons 	<p>Throughout Year 8 Computing, students should have been taught to –</p> <ul style="list-style-type: none"> undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability use the internet to access websites and recognise their common features 	<p>Through Year 7 Computing (Introducing Spreadsheets) and Year 8 (Advanced Spreadsheets) students have been taught to –</p> <ul style="list-style-type: none"> explore the real-world application of spreadsheets in order to understand how software is used to capture and model data for a range of purposes <p>Students will have also have been taught to -</p> <ul style="list-style-type: none"> undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability
Transferrable knowledge (skills)	<ul style="list-style-type: none"> Being able to access computer systems, navigate to specific files and organise work in a logical structure. 	<ul style="list-style-type: none"> Being able to access computer systems, navigate to specific files and organise work in a logical structure. 	<ul style="list-style-type: none"> Being able to access computer systems, navigate to specific files and organise work in a logical structure.

		<p>other websites and create a navigation bar. These are all real-world elements of websites and enable students to develop skills linked to IT careers in the creative sector. Additionally, these skills will support students in transitioning into GCSE Computer Science, Business Enterprise and Digital Information Technology KS4 courses.</p> <p>This unit will guide students through planning and developing their own website about their hobbies or interests. They will use the design cycle to create a site plan, decide on the page layout that they wish to use and set up their style sheet by editing template documents. The review aspect of the course will support them in being able evaluate the success of their product as well as their skills.</p>	<p>to model a business budget). The syntax of spreadsheet formulae and functions also translates well to programming used within GCSE Computer Science.</p>
--	--	---	--