



Alcester Academy Curriculum Planning: Key Stage 3 – Year 7 2023-24

Pupils in year 7 have a single (1 hour) lesson of ICT & Computing each week.

Department: <i>ICT & Computing</i>							
Term	Topic/Subj ect	Assessment Objectives	Knowledge Acquisition	Skill building & intent	Wider reading opportunities, including numeracy & SMSC	Assessment Task	SEND & PP
Aut 1	<p>(0) Network Introduction</p> <p>(1) Website Design</p>	<ul style="list-style-type: none"> Understand how to log onto the network, save files in correct folder area. Understand how to analyse the success of websites, and function of specific graphics. Understand how to create a website suitable for a specific target audience. Understand how to create master page templates to ensure a consistent website design. Understand how to apply appropriate content, suitable for purpose & target audience. Understand how to evaluate success of website design. 	<p>Pupils learn how to use the network, and how to use Google Classroom & Drive.</p> <p>Pupils learn how to create a website design for a specific purpose & target audience, using Google Sites.</p>	<p>Introduction to the network, user names, passwords, logging on. Setting up folder structure, saving files in correct folder area. Use of shortcuts for teaching resources. Use of learning logs.</p> <p>Pupils to conduct research looking specifically at different website graphics (banners, buttons etc) relevant to theme of project.</p> <p>Pupils to plan content and structure of website, by producing planning - sitemaps & visualisation diagrams.</p> <p>Pupils to create master page. Pupils to then setup suitable site structure.</p> <p>Demonstration of use of header design, pupils to create homepage & add appropriate content.</p> <p>Pupils to add other appropriate pages to site, including content relevant to client brief.</p> <p>Pupils to use peer evaluation & self evaluation to analyse success of website design. Identify and act on improvements.</p>	<p>Resources are introduced, and demonstrated to pupils visually. Appropriate use of school network, and internet. Explanation of user agreement. Keywords: folder & filenames.</p> <p>Resources are introduced, and demonstrated to pupils visually. Refer to importance of website design, graphical design industries. Reference to professionally designed examples of websites. Access to technology, websites, devices used to view websites. Keywords – target audience, requirements, site structure.</p> <p>https://edu.gcfglobal.org/en/beginning-graphic-design/layout-and-composition/1/</p> <p>Comparison of how professional websites have been designed, graphics used, purpose.</p> <p>https://99designs.co.uk/blog/tips/design-composition-and-layout/</p>	<p>n/a</p> <p>Assessed through continual assessment techniques during lessons, and pupils complete multiple-choice quiz at end of the unit on Google Forms.</p> <p>Assessment results & teacher feedback then recorded by pupils on their own online individual learning logs.</p>	<p>Additional support to be provided where required for both SEND & PP pupils to help access resources.</p> <p>Techniques are demonstrated & explained during lessons, highlighting how to use features of software. Additional support to be provided where required for both SEND & PP pupils to help access resources</p>



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					Peer evaluation.		
Aut 2	(2) OSA E Safety Course	<ul style="list-style-type: none">Understand how to complete the Online Safety Alliance e-safety course requirements.	Pupils learn how to identify appropriate risks of online activity, and how to report these concerns.	Using OSA online e-safety resources pupils will complete a variety of online tests to check understanding & knowledge of topics including online bullying, grooming, live streaming, safe smartphone use, digital footprints, health risks, consequences of poor choices, and how to report concerns.	Resources are introduced, and demonstrated to pupils visually. A Combination of website based based instructions, and tutorial videos are then used throughout. Safe use of internet, dangers to be aware of with other technologies. Topics to be covered include online bullying, use of smartphones, staying safe & healthy, digital	Pupils will complete online tests for each section of the OSA course, and require a pass rate of at least 80%. They will receive a certificate on completion of this course.	Additional support to be provided where required for both SEND & PP pupils to help access resources.



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					<p>citizenship, cybersecurity, consequences, and how to report concerns.</p> <p>Keywords: E-Safety terms, including grooming, streaming, digital footprints.</p> <p>https://certificate.online.safetyalliance.org/#home-page-carouse!</p>		
Spr 1	(3) Scratch Coding	<ul style="list-style-type: none"> Understand how to sequence instructions in scratch. Understand how to use coding techniques in Scratch. Understand how to use two or more programming languages, at least one of which is textual. Understand how to design and develop modular programs that use procedures or functions. 	<p>Pupils learn how to use visual block coding techniques using Scratch software.</p>	<p>Introduction to using Scratch v3 resources to produce a variety of animations, games, and interactive programs such as a chatbot.</p> <p>Pupils will learn how to use correct sequencing of instructions, how to use loops, how to create & use variables, how to use input/output, if & else decision statements, boolean operators, and other combinations of programming constructs.</p> <p>Pupils will complete a range of 6 different mini-project activities during this initial module.</p> <p>Extension activities are integrated into each project task.</p> <p>This unit focuses on the development of the following key techniques:</p> <ul style="list-style-type: none"> Sequencing Variables Selection Operators 	<p>https://codeclubproject.s.org/en-GB/scratch/</p> <p>Sequence of instructions, loops, variables, input/output, if/else decision statements, boolean operators.</p> <p>Variables, random numbers, coordinates.</p> <p>https://scratch.mit.edu/</p> <p>Introduction to game design, how this can be developed into career choice – discussion of importance of understanding need for computing skills.</p> <p>Keywords: sequencing, selection, variables, operators, count controlled iteration.</p>	<p>Assessed through continual assessment techniques during lessons, and pupils complete multiple-choice quiz at end of the unit on Google Forms.</p> <p>Assessment results & teacher feedback then recorded by pupils on their own online individual learning logs.</p>	<p>Techniques are demonstrated & explained during lessons, highlighting how to use features of software.</p> <p>Additional support to be provided where required for both SEND & PP pupils to help access resources</p>



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				<ul style="list-style-type: none"> Count-controlled iteration 			
Spr 2	(3) Scratch Coding	Continue & complete remaining lessons for unit 3 (above)	Pupils learn how to use visual block coding techniques using Scratch software.	Pupils will complete a range of 6 different mini-project activities during this initial module.		Assessed through continual assessment techniques during lessons, and pupils complete multiple-choice quiz at end of the unit on Google Forms. Assessment results & teacher feedback then recorded by pupils on their own online individual learning logs.	Techniques are demonstrated & explained during lessons, highlighting how to use features of software. Additional support to be provided where required for both SEND & PP pupils to help access resources
Sum1	(4) Spyschool Spreadsheets	<ul style="list-style-type: none"> Identify columns, rows, cells, and cell references in spreadsheet software Use formatting techniques in a spreadsheet Use basic formulas with cell references to perform calculations in a spreadsheet (+, -, *, /) Use the autofill tool to replicate cell data Explain the difference between data and information Explain the difference between primary and secondary sources of data Collect data & analyse data Create appropriate charts in a spreadsheet Use the functions SUM, COUNTA, MAX, and MIN in a spreadsheet Use a spreadsheet to sort and filter data Use the functions AVERAGE, COUNTIF, and IF in a spreadsheet Use conditional formatting in a spreadsheet 	Pupils learn how to use core functions of spreadsheet software, using Google Sheets.	<p>The spreadsheet unit for Year 7 takes learners from having very little knowledge of spreadsheets to being able to confidently model data with a spreadsheet. The unit uses engaging activities to progress learners from using basic formulas to writing their own COUNTIF statements. This unit will give learners a good set of skills that they can use in computing lessons and in other subject areas.</p> <p>This unit focuses on spreadsheet skills, including:</p> <ul style="list-style-type: none"> Use cell references Use the autofill tool Format data Create formulas for add, subtract, divide, and multiply Create functions for SUM, COUNTA, AVERAGE, MIN, MAX, and COUNTIF 	<p>Resources are introduced, and demonstrated to pupils visually. A combination of website based based instructions, and tutorial videos are then used throughout.</p> <p>Highlight the uses of spreadsheets, why these are used throughout organisations & businesses worldwide.</p> <p>Keywords: cell, references, format, formulas, functions, graphs, conditional formatting.</p>	Assessed through continual assessment techniques during lessons, and pupils complete multiple-choice quiz at end of the unit on Google Forms. Assessment results & teacher feedback then recorded by pupils on their own online individual learning logs.	Techniques are demonstrated & explained during lessons, highlighting how to use features of software. Additional support to be provided where required for both SEND & PP pupils to help access resources



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				<ul style="list-style-type: none"> • Sort and filter data • Create graphs • Use conditional formatting 			
Sum 2	(5) BBC Microbit	<ul style="list-style-type: none"> • Understand how to make a physical computing device work using inputs and outputs. • Understand how to construct programs that use input to control output LEDs. • Understand how to use sequencing & repetition, including the use of both infinite & count controlled loops. • Understand how inputs can be used to trigger an output. • Understand how to develop debugging skills. • Relevant concepts covered include programming, computational thinking, and computer systems. • Programming - debugging, sequencing, loops, repetition. • Computational thinking - algorithms, abstraction, decomposition, pattern recognition. • Computer systems - control, inputs and outputs. 	Pupils learn how to incorporate coding techniques to control a physical computing device (BBC Microbit).	To use two or more programming languages, at least one of which is textual, to solve a variety of computational problems. Pupil will have the opportunity to use visual code resources, and compare equivalent Mu Python code language for Microbit.	Resources are introduced, and demonstrated to pupils visually. A combination of website based instructions, and tutorial videos are then used throughout. Importance of computer programming/coding skills, opportunities in career development. Keywords: debugging, sequencing, loops, repetition, algorithms, abstraction, decomposition.	Assessed through continual assessment techniques during lessons, and pupils complete multiple-choice quiz at end of the unit on Google Forms. Assessment results & teacher feedback then recorded by pupils on their own online individual learning logs.	Techniques are demonstrated & explained during lessons, highlighting how to use features of software. Additional support to be provided where required for both SEND & PP pupils to help access resources