Oak Hill Academy West London — an Aspirations Academy

Whole School Computing Curriculum

TERM (WEEKS)	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
ASPIRATIONS FOCUS	**BELONGING**	**CURIOSITY & CREATIVITY**	**HEROES**	**SPIRIT OF ADVENTURE**	**LEADERSHIP & RESPONSIBILITY**	**FUN and EXCITEMENT**
YEAR 3 Information technology Digital Literacy Computer science	**LOCATION, LOCATION, LOCATION**	**STONES AND BONES**	**AWESOME ANCIENT EGYPTIANS**	**AVENGERS ASSEBMLE!**	**PLANT POWER**	**ALL THE WORLD'S A STAGE**
	DIGITAL LITERACY – ONLINE SAFETY NEW PROCEDURES Search engine Passwords Online Safety Safety awareness ● talk about key online safety 'rules' and knows where to go / report if a problem arises. ● find some straight-forward information from (selected) website resource(s) and know not all websites are 'good to use'. .	**DIGITAL LITERACY -ONLINE SAFETY/COMPUTER SCIENCE** CONNECTING COMPUTERS Personal Drive Accessing and using shared drives Search Engines Website logins/Archaeological app/Useful websites ● create and share some information online (such as in school MLE, email/blog), understanding the need to be responsible, respectful and safe. ● find some straight-forward information from (selected) website resource(s) and know not all websites 'good to use'. ● navigate their way within some straight-forward digital content, such as selected history content, to find some specific information. ● create and amend a (multi-media) resource that shows a sense of 'audience'	**DIGITAL LITERACY - ONLINE SAFETY/INFORMATION TECHNOLOGY /COMPUTER SCIENCE** VR DISCOVERY & APP MAKER BRANCHING DATABASES Trust Reporting concerns Archaeological app Creating desktop publishing docs (e.g. illustrating / formulating) ● talk about key online safety 'rules' and knows where to go / report if a problem arises. ● use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) ● demonstrate logical 'trial and error' when using a computer simulation, 'model' or game, and predicts some consequences of decisions/choices made. ● make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing	**COMPUTER SCIENCE** CODING Sequencing and timing block program Appropriate instruction input Shape and programming (e.g. Logo) Debugging Document conditionals' ● produce an accurate set of simple instructions (code), to program (control) an on-screen object (or floor 'robot'), using trial and error to debug. ● demonstrate logical 'trial and error' when using a computer simulation, 'model' or game, and predicts some consequences of decisions/choices made. ● talk about how the sequence of events in some simple instructions (algorithms) or code are 'working'. ● talk about some digital devices beyond school, that need precise instructions (algorithms) to work / be programmed (controlled). ● know some relevant computing terms such as computer network, Internet, algorithm,	**DIGITAL LITERACY - ONLINE SAFETY/INFORMATION TECHNOLOGY** ADVERTISING Trust Reporting concerns Exploring Google Docs / Slides Publishing with Google Docs / Slides (e.g. text and images) ● talk about key online safety 'rules' and knows where to go / report if a problem arises. ● use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) ● make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. ● create and amend a (multi-media) resource that shows a sense of 'audience'. ● navigate their way within some straight-forward digital content, such as selected history content, to find	**ONLINE SAFETY /INFORMATION TECHNOLOGY** BLOGGING Using shared drives Publishing Introducing and publishing with Google Slides ● talk about key online safety 'rules' and knows where to go / report if a problem arises. ● use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) ● make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. ● create and amend a (multi-media) resource that shows a sense of 'audience'.

YEAR 4						
		• Know some relevant computing terms such as computer network, Internet, algorithm, program, World Wide Web, website, etc.	tools, to both correct and improve it. • create and amend a (multi-media) resource that shows a sense of 'audience'. • navigate their way within some straight-forward digital content, such as selected history content, to find some specific information.	program, World Wide Web, website, etc.	some specific information.	• navigate their way within some straight-forward digital content, such as selected history content, to find some specific information
YEAR 4	DESTINATION EUROPE	ROCK BAND	TIME COP	I'M A CHILD, GET ME OUT OF HERE!	WELCOME TO HONEYDUKES!	ALL THE WORLD'S A STAGE
	DIGITAL LITERACY -ONLINE SAFETY/INFORMATION TECHNOLOGY Online Safety Safety Awareness Using Google Docs Organising Docs • talk about key online safety 'rules', know what may be unacceptable behaviour, and know where to go / report if a problem arises. • find straight-forward information from (selected) website resource(s) and known sites can contain, true or false facts, or opinion. • use software to create and combine content (be it text, pictures / images, graphs, animation, podcast etc.,) for meaningful purpose(s). • edit and amend their digital work (text, image, sound etc.,) using simple editing	**COMPUTER SCIENCE** CODING Sequencing of programs (e.g. repletion in shapes/games) Understanding program software Programming and modification • produce, debug and edit an accurate sequence of instructions, including use of repeat, to control on-screen objects. • demonstrate logical choices and prediction when using a computer simulation, 'model' or game and can make simple edits to solve a problem. • plan and create a program using decomposition; includes the use of selection (IF/ELSE) and/or variables. • talk about different types of input options e.g. motion /touch, microphone, data logging sensor; and output options e.g. switch, speakers, screen, etc. • develop and use a wider computing 'vocabulary' relevant to work, such as	**INFORMATION TECHNOLOGY – BLOGGING DIARY ENTRIES** Researching effectivity Creating effective blogs Presenting to audience Presentational features • use software to create and combine content (be it text, pictures / images, graphs, animation, podcast etc.,) for meaningful purpose(s). • create and amend a multi-media resource that shows a sense of 'audience'. • include some information / content from an online resource within a 'presentation'. • save and retrieve work from electronic folders (and print if appropriate to task).	**DIGITAL LITERACY - ONLINE SAFETY** DT PROJECT THE INTERNET Accessing and editing in shared drives Complex passwords Advanced and refined searches Website reliability • talk about key online safety 'rules', know what may be unacceptable behaviour, and know where to go / report if a problem arises. • create and share some information online (such as school MLE, email / blog), demonstrating the need to be respectful and safe. • find straight-forward information from (selected) website resource(s) and know sites can contain, true or false facts, or opinion.	**INFORMATION TECHNOLOGY – ADVERTISING** Introduction to advertising and presentations Publishing and delivering presentations Presentational features • use software to create and combine content (be it text, pictures / images, graphs, animation, podcast etc.,) for meaningful purpose(s). • also edit and amend their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. • create and amend a multi-media resource that shows a sense of 'audience'. • navigate their way within a range of (selected) online content, to find specific information. • include some information / content from an online resource within a 'presentation'.	**DIGITAL LITERACY -ONLINE SAFETY/INFORMATION TECHNOLOGY / BLOGGING** Reporting unpleasant materials Presentational features including backgrounds Sequencing presentations • talk about key online safety 'rules', know what may be unacceptable behaviour, and know where to go / report if a problem arises. • use software to create and combine content (be it text, pictures / images, graphs, animation, podcast etc.,) for meaningful purpose(s). • create and amend a multi-media resource that shows a sense of 'audience'. • include some information /

	tools, to both correct and improve it. ● create and amend a multi-media resource that shows a sense of 'audience'.	de-bug, Apps, data logging, search engine, spam, Wiki, etc.demonstrating responsible, respectful and safe behaviours.			● use a data file to find answers to straight-forward questions, (such as through data logging or a survey or a prepared database or a simple spreadsheet, etc.). ● save and retrieve work from electronic folders (and print if appropriate to task).	content from an online resource within a 'presentation'. ● save and retrieve work from electronic folders (and print if appropriate to task).
YEAR 5	**JOURNEY TO THE AMAZON**	**MISSION: SPACE**	**SAXON SETTLERS AND VIKIING INVADERS**	**THE CIRCLE OF LIFE**	**THE GREAT OAKHILL SEWING BEE**	**ALL THE WORLD'S A STAGE**
	DIGITAL LITERACY - ONLINE SAFETY Passwords Online Safety Safety Awareness Responsibility and Ownership Reporting Concerns ● talk about key online safety 'rules', knows what may be unacceptable behaviour, and knows where to go / report if a problem arises. ● demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. ● communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating responsible respectful and safe behaviours.	**DIGITAL LITERACY -** ONLINE SAFETY Appropriate application of software Advance and refined searches Comparing websites Website reliability ● talk about key online safety 'rules', know what may be unacceptable behaviour, and know where to go / report if a problem arises. ● demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. ● communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating responsible, respectful and safe behaviours. ● Understands some simple steps to 'validate' information found on the Web, and appreciates how search results are selected and ranked.	**COMPUTER SCIENCE – CODING** Scratch customisation Looping Conditional looping ● test, debug and edit a program that accomplishes a given goal, (simple computer 'game' or model or simulation), to solve a problem. ● create & develop programs, by planning, debugging and applying programming skills of repetition (loops), selection (IF/ELSE) and variables, to accomplish specific goals. ● use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging and / or 'elegant' / efficient. ● use different types of input options and output options such as through sensing and control 'kits' and/or software to solve a problem. ● has an understanding of computer networks (local, internet services and WWW). ● Develop and use a wider computing 'vocabulary' in context of tasks, such as	**DIGITAL LITERACY - ONLINE SAFETY/INFORMATION TECHNOLOGY -** BLOGGING Introducing sequencing and timing (e.g. Google Slides / Prezi) Collaborating with documents Website reliability and bias Appropriate application of software Publishing with appropriate application/ software ● demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. ● communicate and collaborate online (such as in MLE blog/Wiki /forum), ● use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. ● combine resources from different sources into a digital presentation, showing a clear sense of intended purpose and 'audience'. ● find specific and valid information (i.e. be discerning) using sensible key words / search terms, from (selected) online web content, as fits the task.	**INFORMATION TECHNOLOGY -** SPREADSHEETS Inputting data on spreadsheets (e.g. to know how) Appropriate application of software ● use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. ● find specific and valid information (i.e. be discerning) using sensible key words / search terms, from (selected) online web content, as fits the task. ● collect, analyse and draw conclusions from data, (such as through data logging or a survey or a prepared database or through manipulating a spreadsheet, etc.). ● save and retrieve work from various electronic folders on network (and controlled online environments where relevant). ● collect, analyse and draw conclusions from data, (such as through data logging or a survey or a prepared database or	**INFORMATION TECHNOLOGY -** DICTATION/AUDIO BOOKS VECTOR DRAWING Using software effectively to create, design and manipulate Appropriate application of software Publishing with appropriate application/ software ● use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. ● combine resources from different sources into a digital presentation, showing a clear sense of intended purpose and 'audience'. ● find specific and valid information (i.e. be discerning) using sensible key words / search terms, from (selected) online web content, as fits the task. ● ● save and retrieve work from various electronic folders on the network (and controlled online

			search engine, URL, HTML, https, variable, validate, digital footprint, etc.	• (collect), analyse and draw conclusions from data, (such as through data logging or a survey or a prepared database or through manipulating a spreadsheet, etc.). • save and retrieve work from various electronic folders on the network (and controlled online environments where relevant).	through manipulating a spreadsheet, etc.).	environments where relevant).
YEAR 6	**RING OF FIRE**	**THE OLD TOY SHOP**	**WW2 BRITAIN AT WAR**	**AT THE HEART OF THE JUNGLE**	**THANK YOU, YOUR MAJESTY!**	**ALL THE WORLD'S A STAGE**
	DIGITAL LITERACY/ INFORMATION TECHNOLOGY ONLINE SAFETY POSTER Google Docs/Slides/Excel Validation of Searches Social Media and Privacy Social Media and Law Reliability of Sources • demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. • discuss a range of online safety and online security (privacy) issues and knows a range of ways to report concerns or inappropriate behaviour. • communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating responsible, respectful and safe behaviours. • check the results of web searches i.e. how useful, relevant, reasonable, valid, accurate, and appreciates how search results are selected & ranked. • combine resources from different sources into a digital presentation,	**INFORMATION TECHNOLOGY/ DIGITAL LITERACY -ONLINE SAFETY** 3D MODELLING Hacking illegality Games/ Social Media / Sharing Information Online and Consent Appropriate application of software Presenting to audience demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. discuss a range of online safety and online security (privacy) issues and knows a range of ways to report concerns or inappropriate behaviour. communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating responsible, respectful and safe behaviours. check the results of web searches i.e. how useful, relevant, reasonable, valid, accurate, and appreciates how search results are selected & ranked.	**COMPUTER SCIENCE** CODING Conditional programming (e.g. mathematical expressions) Program explanation and predicting changes • test, debug and edit a program that accomplishes a given goal, (simple computer 'game' or model or simulation), to solve a problem. • create & develop programs, by planning, debugging and applying programming skills of repetition (loops), selection (IF/ELSE) and variables, to accomplish specific goals. • use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging and / or 'elegant' / efficient. • use different types of input options and output options such as through sensing and control 'kits' and/or software to solve a problem. • has an understanding of computer networks (local, internet services and WWW).	**INFORMATION TECHNOLOGY - SPREADSHEET** Introduction to spreadsheets Formulas Applying formulas • use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. • combine resources from different sources into a digital presentation, evaluate it, and show clearly intended purpose and 'audience' • discern and find valid information using sensible key words / search terms, from a range of online web content, as fits the task. • collect, analyse, evaluate and draw conclusions from data, such as through surveys, databases or spreadsheets, etc. • save and retrieve work from various electronic folders on the network (and controlled online environments where relevant).	**COMPUTER SCIENCE** CODING Conditional sentences Mathematical expressions Predict changes due to programming alterations • test, debug and edit a program that accomplishes a given goal, (simple computer 'game' or model or simulation), to solve a problem. • create & develop programs, by planning, debugging and applying programming skills of repetition (loops), selection (IF/ELSE) and variables, to accomplish specific goals. • use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging and / or 'elegant' / efficient. • use different types of input options and output options such as through sensing and control 'kits' and/or software to solve a problem. • has an understanding of computer networks	**INFORMATION TECHNOLOGY/ DIGITAL LITERACY -ONLINE SAFETY** Web Page Making Editing pictures Publishing videos Social Media risks Illegality of pictures (preparing for secondary) • demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. • discuss a range of online safety and online security (privacy) issues and knows a range of ways to report concerns or inappropriate behaviour. • communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating responsible, respectful and safe behaviours. • check the results of web searches i.e. how useful, relevant, reasonable, valid,

	<mark>evaluate it, and show clearly intended purpose and 'audience'</mark> ● discern and find valid information using sensible key words / search terms, from a range of online web content, as fits the task. ● save and retrieve work from various electronic folders on the network (and controlled online environments where relevant).		develop and use a wider computing 'vocabulary' in context of tasks, such as search engine, URL, HTML, https, variable, validate, digital footprint, etc.		(local, internet services and WWW). ● develop and use a wider computing 'vocabulary' in context of task, such as search engine	accurate, and appreciates how search results are selected & ranked. ● combine resources from different sources into a digital presentation, evaluate it, and show clearly intended purpose and 'audience' ● discern and find valid information using sensible key words / search terms, from a range of online web content, as fits the task. ● save and retrieve work from various electronic folders on network (and controlled online environments where relevant).