



Whitley Abbey Primary School

Hand in hand we learn

Computing Curriculum

Curriculum Drivers			
Possibilities and Citizenship	Reading and Vocabulary	Health and Wellbeing	Celebrating Diversity
<p>Our curriculum is designed to promote aspirations by preparing children for a changing world by making links between their learning and careers and opportunities in adult life. The curriculum enables children to make connections between what is learnt in school and open-up possibilities for them in later life.</p> <p>Teachers support children to be good citizens through the development of British Values and the core learning values of; Commitment, Opportunity, Respect and Excellence.</p>	<p>Our curriculum is designed to meet the needs of the children we serve placing great emphasis on the development of tier 2 and tier 3 vocabulary and fluency in reading. At Whitley Abbey we recognise that vocabulary development helps children to communicate effectively and to understand what they hear.</p> <p>Reading enables pupils to develop independent learning skills – skills that will serve them well in later life.</p>	<p>Our curriculum is designed to promote children’s health, wellbeing and resilience through the promotion of Whitley Character Values, friendship, kindness, courage, resilience, gratitude and honesty. We want our children to make good choices about their own health and wellbeing.</p> <p>Research suggested that better emotional wellbeing is associated with higher achievement in primary school. When children feel safe they are able to better access learning in the classroom.</p>	<p>Our curriculum is designed to celebrate diversity. This means understanding that each individual is unique and recognising and celebrating our individual differences. The concept of diversity encompasses community, acceptance and respect. We foster the exploration of these differences in a safe, positive, and nurturing environment.</p> <p>We believe that by practicing mutual respect for qualities and experiences that are different from our own we build alliances across differences so that we can work together to eradicate all forms of discrimination.</p>

Intent

At Whitley Abbey Primary school we encourage pupils to become MASTERS of technology. Technology is everywhere and will play a pivotal part in students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. In every year group each term pupils will complete an online safety unit of work. We subscribe to the nationalonlinesafety.com site and therefore have access to units of work linked to local and national issues. Our curriculum is planned but it is expected that teachers may substitute units of work to tackle current issues that are pertinent to the pupils that they teach.

Our computing curriculum focuses on the study of computer science and is knowledge rich. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible through continuous provision. We want our pupils to be fluent with a range of tools to best express their understanding. We aspire that by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers in other areas of the curriculum.

Implementation

Resources

At Whitley Abbey Primary school we follow the National Curriculum and use Purple Mash to support the teaching of computing and to support non specialist teachers in the delivery of the curriculum. Each of the units of work are linked to programs to support the development of key skills in computing and to promote the development of Key vocabulary.

Assessment:

At Whitley Abbey Primary School, assessment is carried out in accordance with our Assessment Policy. Ongoing teacher assessment ensures that skills are developed and progress is made in the area of Computing. Key assessment questions are planned for in the curriculum, at the end of each unit of work.

Class teachers also assess each child's skills through application in other subjects – for example producing a word processed document as part of another subject or data handling in geography or science (for example).

Monitoring:

- Books scrutiny to check coverage of content, skills, quality and evidence of key computing vocabulary being taught in all topics.
- Pupil voice
- Teacher observations
- Evidence of continuous assessment

Work-life balance:

The Purple Mash scheme of work and national online safety site support staff by providing high quality resources to support the teaching of the computing curriculum in its entirety.

EYFS	
<p>In the Foundation Stage, the learning and development of computing is taught throughout all areas of the curriculum as and when it compliments existing learning opportunities. For example computing may be taught through providing pupils opportunities to:</p> <ul style="list-style-type: none"> • take a photograph with a camera or tablet • search for information on the internet • play games on the interactive whiteboard • explore an old typewriter or other mechanical toys including telephones and keyboards in role play • using a Beebot • watching a video clip • listening to music <p>. These experiences and skills prepare the children for work in Y1 onwards and subject specific study.</p> <p>ELG: Managing Self Children at the expected level of development will: - Be confident to try new activities and show independence, resilience and perseverance in the face of challenge;</p>	
Key Stage 1	Key Stage 2
<p>Pupils should be taught to: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions; create and debug simple programs; use logical reasoning to predict the behaviour of simple programs; use technology purposefully to create, organise, store, manipulate and retrieve digital content ; recognise common uses of information technology beyond school ; use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>	<p>Pupils should be taught to: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts; use sequence, selection, and repetition in programs; work with variables and various forms of input and output; use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs ; understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration ; use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content ; select, use and combine a variety of software (including internet</p>

services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information ; use technology safely.

EYFS Our EYFS curriculum is planned but may be adapted to be responsive to pupil's interests	
- Example - Teacher Led experiences	Example - Enhanced Provision opportunities linked to Computing
<p>Children in Nursery and Reception will engage in ongoing learning in this subject throughout the academic year. Lesson content from the UKCIS “Education for a Connected World” framework. There are 8 areas:</p> <p>1) Self-image and self-identity 2) Online relationships 3) Online reputation 4) Online bullying 5) Managing online information 6) Health well-being & lifestyle 7) Privacy and security 8) Copyright and ownership.</p>	<ul style="list-style-type: none"> ~ Toys that move in different ways ~ Light box and torches ~ Toy microphone ~ Use of iPads and tablets ~ Controlling and listening to audio stories on a CD player ~ Using equipment to enhance play in role play, such as a till. ~ Use Google to find out information ~ Use of Google maps ~ Use of Beebots

<p>0-4 lesson plans based on the 8 topics outlined on National Online Safety website.</p> <p>Children will also access ‘Smartie the Penguin’ and ‘DigiDuck’ with their teachers during whole class teaching.</p>	<p>~ Taking photographs and short videos using iPads.</p> <p>~ Use of Purple Mash</p> <p>~ Use of Interactive Whiteboards</p>
<p>Vocabulary <i>Choices, Internet, Website, Equipment, Buttons, Movement, Screen, Mouse, Images Keyboard, Technology, Share, Create, collect, count, organise.</i></p>	<p>Assessment Questions Can children name the main parts of a computer? Can children explain a use for the internet? Can children talk about what they should not share online? Can children use technology with increasing confidence?</p>

Year 1

		Autumn	Spring	Summer
Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> create and debug simple programs use logical reasoning to predict the behaviour of simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies 		<p>Deliberate practise vocabulary:</p> <p>Rules, Online, Private information, Email, Safe, Unsafe, Report.</p>
	Continuous provision	<p>Our computing curriculum aims to explicitly teach Computer Science Skills.</p> <p>Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.</p>		
	Knowledge Assessment questions:	<p>Safety/ Technology beyond school / grouping and sorting National Online Safety Unit - Self image and identify <u>Assessment Questions:</u></p> <ul style="list-style-type: none"> Do children know how to keep themselves safe online? <p>Unit 1.9</p> <ul style="list-style-type: none"> Can children name 4 ways which technology is used at home? Can children 4 ways technology is used outside of school and home? Can children explain what is mean by technology? 	<p>Spreadsheets National Online Safety Unit – Online Relationships <u>Assessment Questions:</u></p> <ul style="list-style-type: none"> Do children know how to keep themselves safe online? <p>Unit 1.8</p> <ul style="list-style-type: none"> Can children enter data into cells Can children save files? Can children manipulate data? Can children explain what a spreadsheet is and how it might be used? 	<p style="text-align: center;">Algorithms</p> <p>National Online Safety Unit – Online Reputation <u>Assessment Questions:</u></p> <ul style="list-style-type: none"> Do children know how to keep themselves safe online? <p>2Code –Unit 1.7</p> <ul style="list-style-type: none"> Can children understand that an algorithm is a set of instructions? Can children use an algorithm to solve a problem of achieve an objective? Do children know that an algorithm written for a computer is called a program?

		<ul style="list-style-type: none"> Can children describe how technology helps us to communicate? Unit 1.2 <ul style="list-style-type: none"> Can children sort and classify objects? Can children use a simple computer program to present their findings? 		
	Vocabulary	Technology, communication, program, present, sort,	Rows, columns, cells, arrow keys, delete back space	Algorithm, Program, instruction, order, debug

Year 2

	Term	Autumn	Spring	Summer
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Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> create and debug simple programs use logical reasoning to predict the behaviour of simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies 			Deliberate practise vocabulary: Appropriate/inappropriate sites Cyber-bullying Digital footprint Keyword searching
	Continuous provision	Our computing curriculum aims to explicitly teach Computer Science Skills. Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.			
	Knowledge Assessment questions:	National Online Safety Unit – Online Bullying Assessment Questions <ul style="list-style-type: none"> Do children know how to keep themselves safe online? Unit 2.3 Spreadsheets <ul style="list-style-type: none"> Can children enter data into cells? Can children allocate a value to an image? Can children manipulate data using copy and paste to solve puzzles? Can children create a spreadsheet which includes a graph? Can children add labels to their spreadsheets and graphs? Can children answer questions about data? 	National Online Safety Unit – Managing Online information Assessment Questions <ul style="list-style-type: none"> Do children know how to keep themselves safe online? 2Question - Unit 2.4 <ul style="list-style-type: none"> Can children create a pictogram to represent data? Can children organise data in a data base? Can children use a binary tree to sort information, manipulate data and answer questions? Can children design their own binary tree? Can children run searches on a data set? 	National Online Safety Unit – Health wellbeing and lifestyle Assessment Questions <ul style="list-style-type: none"> Do children know how to keep themselves safe online? 2Code – Unit 2.1 <ul style="list-style-type: none"> Can children create algorithms of more than 1 step? Can children translate algorithms into code? Can children make predictions about what will happen? Can children debug a program? Can children test their own programs and make modifications? 	

	Vocabulary	Data, spreadsheet, graph, label, copy, paste, cut, value	Pictogram, data, database, binary tree, binary, search, sort, present.	Algorithm, code, debug, program, design, test, translate.
Year 3				
	Term	Autumn	Spring	Summer
Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 		
		Deliberate Practise Vocabulary: E-safety rules Secure passwords Report abuse button Gaming Blogs		
Continuous provision	Our computing curriculum aims to explicitly teach Computer Science Skills. Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.			
	Knowledge Assessment questions:	National Online Safety Unit – Self Image and identity Activity 1 <u>Assessment Questions</u> Ray Tomlinson <ul style="list-style-type: none"> Can children explain what is meant by the term identity? Unit 3.5 <ul style="list-style-type: none"> Can children list different ways that the internet can provide a range of platforms to communicate? Can children explain and compare each communication method? Can children exchange emails? Can children open and respond to emails? Can children select a recipient from their address book? Can children add an attachment to an email? Can children use the CC functionality? 	National Online Safety Unit - Self Image and identity Activity 2 <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children explain how people can represent themselves in different ways online? Unit 3.3 <ul style="list-style-type: none"> Can children collect and enter data? Can children create a table of data? Can children create a spreadsheet of data? Can children use this data to create graphs or charts? Can children edit headers and add labels? Unit 3.4 <ul style="list-style-type: none"> Can children type with both hands? Can children use the home, top and bottom row keys when typing? 	National Online Safety Unit - Self Image and identity Activity 3 <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children explain ways in which people might change their identity online? Unit 3.1 <ul style="list-style-type: none"> Can children design their own program? Can children code their own program? Can children structure commands in their program in a systematic and logical way? Can children explain their choice of commands and what actions they initiate? Can children integrate multimedia components in their coding? Can children add timers to their program? Can children explain the difference between a timer and a repeat command? Can children use 'if' statements to add selection to their coding?

	Vocabulary	Email, platform, communication, exchange, open, respond, recipient, address book, attachment, Carbon Copy	Data, table, spreadsheet, graph, chart, axis, header, cell, keys, rows, touch type, keyboard	Design, code, program, command, actions, multimedia, sound, animation, timer, repeat, if.	
Year 4					
	Term	Autumn	Spring	Summer	
Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 			
	Continuous provision	<p>Our computing curriculum aims to explicitly teach Computer Science Skills.</p> <p>Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.</p>			
	Knowledge Assessment questions:	<p>National Online Safety Unit – Online reputation 1+2 <u>Assessment Questions</u></p> <ul style="list-style-type: none"> Can children keep themselves safe? Can children explain how online and offline identities can be different? <p>Unit 4.7</p> <ul style="list-style-type: none"> Can children use a search engine? Can children search accurately for intended information using key words? Can children demonstrate their understanding of online safety whilst using search engines? Can children analyse the contents of a web page for obvious clues about the credibility of the information? <p>Unit 4.8</p> <ul style="list-style-type: none"> Can children recognise the main component parts of hardware which allow computers to join and form a network? 	<p>National Online Safety Unit –Online reputation 3 <u>Assessment Questions</u></p> <ul style="list-style-type: none"> Can children describe positive ways for someone interact online? Can they understand how this can impact on how they are perceived? <p>Unit 4.6</p> <ul style="list-style-type: none"> Can children explain what stop animation is? Can children create their own stop animation? Can children use the skin animation tool to show movement across the screen? Can children add backgrounds and sounds to their animation? <p>Unit 4.9</p> <ul style="list-style-type: none"> Can children identify and discuss the main elements of music? Can children demonstrate their understanding of rhythm and tempo? Can children explain what melody is? Can children add melodic pattern using 2sequence? Can children use a variety of notes/experiment with pitch? 	<p>National Online Safety Unit –Online reputation 4 <u>Assessment Questions</u></p> <ul style="list-style-type: none"> Can children explain that others online pretend to be someone else and explain reasons why they might do this? <p>Unit 4.1</p> <ul style="list-style-type: none"> Can children turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts? Can children use coding structures for selection and repetition? Can children identify an error within a program that prevents it following the desired algorithm and then fix it? Can children fix bugs in their own code? Can children use timers to achieve repetition effects in a logical way? Do children understand ‘if statements’ for selection and combine these with other coding structures including variables to achieve the effects that they design in their programs? Can children explain the command ‘repeat until’? 	

Deliberate Practise Vocabulary
E-safety rules
Secure passwords
Report abuse button
Gaming
Blogs

		<ul style="list-style-type: none"> Can children explain that there are different types of network and how they are connected? 	<ul style="list-style-type: none"> Can children create a piece of house music? 	
Vocabulary	Search engine, key words, credibility, component, hardware, network, connection.	Animation, skin, movement, background, sound, rhythm, tempo, melody, pattern, notes, music.	Algorithm, program, deconstruct, parts, bugs, code, if statements, variables, command, repeat until.	

Year 5

	Term	Autumn	Spring	Summer	
Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 			Deliberate Practise Vocabulary: Responsible online communication Informed choices Virus threats Blogs Messaging Cyber bullying
	Continuous provision	Our computing curriculum aims to explicitly teach Computer Science Skills. Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.			
	Knowledge Assessment questions:	National Online Safety Unit – Managing Online Information <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children explain how identity online be copied or modified? Can children demonstrate how to make responsible choices about having an online identity? Jerry Lawson Unit 5.5 <ul style="list-style-type: none"> Can children create a computer game using a template? Can children follow a theme when designing parts of a game? Can children combine text, sound, and graphic components within a game? Can children mix their approaches for image use such as uploading and using the drawing tools? Can children apply animation to objects to enhance their games? Can children design appropriate settings and characters within their games? Can children objectively review and evaluate a range of games? 	National Online Safety Unit – Managing Online Information/ Copy right and ownership <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children explain how identity online be copied or modified? Can children demonstrate how to make responsible choices about having an online identity? Unit 5.7 <ul style="list-style-type: none"> Can children collect and present a range of ideas in a concept map? Can children present their ideas as a whole class presentation? Can children present their ideas as a written text? Can children create an online collaborative concept map? Can children make logical choices for layout and content using images and nodes? Can children give and receive constructive feedback in relation to concept maps? 	National Online Safety Unit – Managing Online Information/ Health and well being <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children explain how identity online be copied or modified? Can children demonstrate how to make responsible choices about having an online identity? Unit 5.1 <ul style="list-style-type: none"> Can children turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts? Can children identify an error within a program that prevents it following the desired algorithm and then fix it? Can children fix bugs in their own and others code? Can children explain the functions of variables in coding? Can children translate algorithms that include sequence, selection and repetition into code? Can children use tabs to organise their code? 	

	Vocabulary	Game, template, theme, design, parts, text, image, sound, graphic, components, uploading, tools, drawing, animation, objects, enhance, setting, character.	Concept map, ideas, present, presentation, online, collaborative, layout, content, images, nodes.	Algorithm, deconstruct, parts, error, program, bugs, code, function, variables, sequence, repetition, tabs.
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Year 6

	Term	Autumn	Spring	Summer
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Computing	Deliberate Practice (Skills)	<ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 			Deliberate Practise Responsible online communication Informed choices Virus threats Blogs Messaging Cyber bullying
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	Continuous provision	Our computing curriculum aims to explicitly teach Computer Science Skills. Digital literacy and Information Technology will be delivered in a cross curricular approach. Therefore, children will be given regular opportunities to practise word processing skills, use search engines, save and edit their work and present ideas in a variety of forms through other areas of the curriculum.		
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Computing	Knowledge Assessment questions:	National Online Safety Unit – Online Bullying <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children identify and critically evaluate online content? Can children explain why it is important to challenge and reject inappropriate representations online? Can children explain how to keep themselves safe in a digital world? Unit 6.6 <ul style="list-style-type: none"> Can children explain the difference between the Internet and the World Wide Web and give examples? Can children show all the things they use the internet for? Can children explain what a WAN and LAN are? Can children describe how they access the internet at school? Can children describe the hypothetical connections their device makes? 	National Online Safety Unit – Privacy and security <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children identify and critically evaluate online content? Can children explain why it is important to challenge and reject inappropriate representations online? Can children explain how to keep themselves safe in a digital world? Unit 6.1 <ul style="list-style-type: none"> Can children turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using coding structures? Can children design a program using 2Code? Can children translate algorithms that include sequence, selection and repetition into code? Can children utilize nesting structures within their code? Can children plan, design and create a program that includes variables relating to timing and 	National Online Safety Unit –Managing online information <u>Assessment Questions</u> <ul style="list-style-type: none"> Can children identify and critically evaluate online content? Can children explain why it is important to challenge and reject inappropriate representations online? Can children explain how to keep themselves safe in a digital world? Unit 6.9 <ul style="list-style-type: none"> Can children explain the benefits of collecting data online? Can children locate frequently used functions and tools and know how to find the functions that they need? Can children use a spreadsheet to carry out basic calculations including all the operations using formulae? Can children use tools such as series fill exist and make use of the assistance they provide? Can children incorporate formulae for percentages, averages, maximum and minimum into their spreadsheets?
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			<p>scoring along with buttons which launch other programs?</p> <ul style="list-style-type: none"> • Can children organise their code using multiple tabs? • Can children use functions within their code to eradicate unnecessary code such as shape creation? • Can children's coding display an understanding of the function of variables in coding? • Can children 'read' code and predict what will happen in a program? • Can children make logical attempts to put the separate parts of a complex algorithm or program together to explain the program as a whole? <p>Can children demonstrate a secure understanding of the impact of changing the position of instructions within 2Code?</p>	<ul style="list-style-type: none"> • Can children draw conclusions from spreadsheet data? <p>Can children use graphic functionality within a spreadsheet program to make their data clearer and use this to answer questions?</p>
Vocabulary	Internet, World Wide Web, WAN, LAN, Network, Connections, devices.	Algorithm, abstraction, decomposing, program, sequence, selection, repetition, nesting structures, variables, timer, scoring, launch, buttons, tabs, functions, code.	Data, online, functions, tools, spreadsheet, calculations, series fill, formulae, formula, percentages, averages, conclusions, graphic functionality, program.	