

# PRIMARY COMPUTING CURRICULUM OVERVIEW



# PRIMARY COMPUTING CURRICULUM OVERVIEW

This overview has been created as a long-term plan for delivering the Computing Curriculum Programmes of Study. To help address different aspects of the Programmes of Study we have identified four themes. This is how the content from the Programmes of Study fits into our four themes:

Programming	Data Handling and Multimedia	Digital Literacy and Online Technologies	e-Safety
<b>Key Stage One</b>			
<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Recognise common uses of information technology beyond school</p>	<p>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>
<b>Key Stage Two</b>			
<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>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</p>	<p>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.</p> <p>Use search technologies effectively, appreciate how [search] results are selected and ranked and be discerning in evaluating digital content .</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

The overview contains thirty-six modules over three phases of primary education, making it possible to consider one module per half term in each year group. However, the number of lessons and time spent will vary from module to module.

The activities are suggestions and provide some guidance on what could be done. They are not prescriptive or exhaustive, but will hopefully lead to the development of learning experiences that will fulfil the wider potential of each module and do ensure coverage of the computing programme of study. (Some example scenarios are provided and will be developed and added to over time.)

A variety of commonly available resources and applications have been suggested, but again there will be many other possibilities for achieving the same ends. **It is important to include 'computational thinking' activities away from the computer during every 'Programming' module. Examples and links to activities are provided in the Primary ICT site of WeLearn365.**

The order of individual modules within each theme may suggest that there is a degree of progression to be considered, particularly in the programming and e-safety activities. Otherwise there is scope for arranging the modules within each phase to suit individual circumstances.

This will constantly be a work in progress which will be adapted as activities are road tested with pupils and may change as a result of innovative new initiatives and resources becoming available.

At the outset it is not envisaged that much if anything at all needs to be done regarding extra investment in resources and that the new computing curriculum can be successfully implemented using much of what currently exists in a typical primary school ICT provision including freely available material. There will be some commercially available products that might significantly enhance the learning experience and these are included where appropriate.

In due course this outline could evolve into a much more detailed scheme featuring a much greater level and more substantial type of information. The computing curriculum needs to remain flexible and responsive to new technologies as well as changes and developments in the school curriculum and the wider educational landscape.

# PRIMARY COMPUTING CURRICULUM OVERVIEW

<b>PROGRAMMING: KEY STAGE 1</b>	
INSTRUCT!	Making things happen
ROBOTS	Controlling floor robots
LOGO	Control an on-screen object
CREATE!	Create a simple activity / game
<b>PROGRAMMING: LOWER KEY STAGE 2</b>	
PROGRAM!	Complete a series of on-screen challenges and tasks
EXPLORE!	Create a visual display / physical model
SYSTEMS	Control a simple physical / simulated system with inputs and outputs
CREATE!	Create a simple activity / game
<b>PROGRAMMING: UPPER KEY STAGE 2</b>	
DESIGN!	Use programming to create an activity for younger children
INSTRUCT!	Create a step by step guide to help someone experience a programming activity
SYSTEMS	Control a more complex physical / simulated system with inputs and outputs
CREATE!	Create an app / game / activity
<b>DATA HANDLING AND MULTIMEDIA: KEY STAGE 1</b>	
GRAPHS	Create charts and graphs
DATABASES	Create a database
STORIES	Create a multimedia story
ANIMATE!	Create an animation
<b>DATA HANDLING AND MULTIMEDIA: LOWER KEY STAGE 2</b>	
BRANCH!	Compare creation of branching databases done manually with computer generated
SPREADSHEETS	Entering data and using simple calculation techniques
CREATE!	Create a multimedia resource for a younger child
<b>DATA HANDLING AND MULTIMEDIA: UPPER KEY STAGE 2</b>	
DATABASES	Searching and interrogating databases
MODEL!	Spreadsheet modeling
BROADCAST!	Make and promote a news broadcast
<b>DIGITAL LITERACY AND ONLINE TECHNOLOGIES: KEY STAGE 1</b>	
TECHNOLOGIES	Technology around us
COMMUNICATE!	Using the Internet – email / message
<b>DIGITAL LITERACY AND ONLINE TECHNOLOGIES: LOWER KEY STAGE 2</b>	
WEBSITES	Computers and networks: working with websites and pages
COLLABORATE!	Online Collaboration – Pupils experience a range of online collaborative experiences (VC, Discussions, Shared Writing, Blogs, Wikis)
THINK!	Making sense of online content
<b>DIGITAL LITERACY AND ONLINE TECHNOLOGIES: UPPER KEY STAGE 2</b>	
NETWORKS	Computers and networks
COLLABORATE!	Online collaboration – Pupils experience a range of online collaborative experiences (VC, Discussions, Shared Writing, Blogs, Wikis)
EVALUATE!	Making Sense of Online Content – Evaluating websites, assessing validity and reliability of web content
<b>E-SAFETY: KEY STAGE 1</b>	
SAFE	Use technology safely and respectfully
ZIP!	Keeping personal information private and know where to go for help and support
<b>E-SAFETY: LOWER KEY STAGE 2</b>	
SMART	Use technology safely, respectfully and responsibly
FLAG!	Recognise acceptable/unacceptable behaviour. Know a range of ways to report concerns about content and contact
<b>E-SAFETY: UPPER KEY STAGE 2</b>	
RESPECT!	Use technology safely, respectfully and responsibly
CONTACT!	Recognise acceptable/unacceptable behaviour and know a range of ways to report concerns about content and contact

# PRIMARY COMPUTING CURRICULUM OVERVIEW

## THE LONG TERM PLAN

PROGRAMMING: KEY STAGE 1		
<b>INSTRUCT!</b>	<b>Making things happen</b> <ul style="list-style-type: none"> <li>• Give instructions to make things happen EG: Get in the car, watch TV, catch a dinosaur.</li> <li>• Sort picture cards to make things happen.</li> <li>• Control toys on a map / grid.</li> <li>• Control robotic people.</li> <li>• Give single spoken instructions.</li> <li>• Give a series of spoken instructions.</li> <li>• Record a series of instructions using any 'code' and test – debug if necessary.</li> <li>• Predict and then follow someone else's recorded instructions.</li> </ul>	<ul style="list-style-type: none"> <li>• Toys</li> <li>• People</li> <li>• Maps</li> <li>• Plans</li> <li>• Grids</li> <li>• Sequence cards</li> </ul>
<b>ROBOTS</b>	<b>Controlling floor robots</b> <ul style="list-style-type: none"> <li>• Give single commands to make the robot move.</li> <li>• Give a series of commands (a program) to make the robot move.</li> <li>• Record a series of instructions (program) and test.</li> <li>• Predict and then follow someone else's program.</li> </ul>	<ul style="list-style-type: none"> <li>• Beebots</li> <li>• Roamers</li> <li>• Pixies</li> <li>• LEGO WeDo</li> <li>• Maps / Grids</li> <li>• Beebot app</li> </ul>
<b>LOGO</b>	<b>Control an on-screen object</b> <ul style="list-style-type: none"> <li>• Write single LOGO commands to move a turtle around the screen to draw shapes, letters, simple pictures and patterns.</li> <li>• Write a sequence of LOGO commands to move a turtle around the screen to draw shapes, letters, simple pictures and patterns.</li> <li>• Use the REPEAT command in a LOGO sequence to move a turtle around the screen to draw shapes, letters, simple pictures and patterns.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>• Textease Turtle</li> <li>• 2Go</li> <li>• Purple Mash - Logo</li> <li>• Purple Mash - 2Go</li> <li>• J2E – JIT</li> <li>• Purple Mash – 2Code</li> </ul>
<b>CREATE!</b>	<b>Create a simple activity / game</b> <ul style="list-style-type: none"> <li>• Plan, design, and program to create a game, model or activity.</li> <li>• Create a pattern using LOGO.</li> <li>• Create a robot using WeDo.</li> <li>• Create a game using 2DIY.</li> <li>• Create an animation using Junior Scratch or 2Animate.</li> </ul>	<ul style="list-style-type: none"> <li>• Textease Turtle</li> <li>• LEGO WeDo</li> <li>• 2DIY</li> <li>• Purple Mash - 2DIY</li> <li>• 2Create A Super Story</li> <li>• Junior Scratch</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>• Create a story using 2Create a Super Story.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>• 2Animate</li> </ul>
<b>PROGRAMMING: LOWER KEY STAGE 2</b>		
<b>PROGRAM!</b>	<p><b>Complete a Series of On-screen Challenges and Tasks</b></p> <ul style="list-style-type: none"> <li>• Pupils work through some programming challenges to build up their knowledge of the programming language</li> <li>• Use and combine the knowledge and skills learnt to create a simple image or animation using the programming language.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>• Textease Turtle</li> <li>• Scratch</li> <li>• Purple Mash – 2Code</li> <li>• A pack of resources can be downloaded from the WL365 Computing Curriculum site.</li> </ul>
<b>EXPLORE!</b>	<p><b>Create a Visual Display / Physical Model</b></p> <ul style="list-style-type: none"> <li>• Pupils are shown an example of how to create a visual display such as a geometric pattern in logo. Based on this and using knowledge gained from the previous unit pupils create a range of their own unique patterns and images.</li> <li>• Pupils explore the 'GETTING STARTED' activities in LEGO WeDo and develop those activities.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>• Textease Turtle</li> <li>• LEGO WeDo</li> <li>• Purple Mash – 2Code</li> <li>• A pack of resources can be downloaded from the WL365 Computing Curriculum site.</li> </ul>
<b>SYSTEMS</b>	<p><b>Control a Simple Physical / Simulated System with Inputs and Outputs</b></p> <ul style="list-style-type: none"> <li>• Follow instructions to build one of the machines from the LEGO WeDo activities, program the machine, develop the machine and the programming. EG Build the Drumming Monkey and program it to drum different rhythms then add and program a sensor to improve the behaviour of the Drumming Monkey.</li> <li>• Create, design, build and program a simple machine after being given a design brief. EG At Xmas make a moving Xmas decoration.</li> <li>• Use Control Station – Haunted House and Funfair simulations to carry out some basic programming.</li> </ul>	<ul style="list-style-type: none"> <li>• LEGO WeDo</li> <li>• Control Station</li> <li>• A pack of resources can be downloaded from the WL365 Computing Curriculum site.</li> </ul>
<b>CREATE!</b>	<p><b>Create a Simple Activity / Game</b></p> <ul style="list-style-type: none"> <li>• Use a programming application to create a simple game or on screen activity that requires user interaction. Make the game available to a specific target audience and observe, evaluate, modify and improve to make the experience better.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>• 2DIY</li> <li>• Textease Turtle</li> <li>• Scratch</li> <li>• 2Create A Super Story</li> <li>• Purple Mash – 2Code</li> </ul>
<b>PROGRAMMING: UPPER KEY STAGE 2</b>		
<b>DESIGN!</b>	<b>Use Programming to Create an Activity for Younger Children</b>	<ul style="list-style-type: none"> <li>• Textease Turtle</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>Pupils develop their programming skills to create one or more educational games or learning activities designed to be used by a younger pupil. The activity will be packaged and evaluated after road testing with real audience members.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>Scratch</li> <li>LEGO WeDo</li> <li>Purple Mash – 2Code</li> </ul>
<b>INSTRUCT!</b>	<p><b>Create a Step by Step Guide to help Someone Experience a Programming Activity</b></p> <ul style="list-style-type: none"> <li>Pupils create a short activity using a programming application and then create a step by step guide to help someone else create something similar. The guide could be text, image, audio or visual.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>Textease Turtle</li> <li>Scratch</li> <li>LEGO WeDo</li> </ul>
<b>SYSTEMS</b>	<p><b>Control a More Complex Physical / Simulated System with Inputs and Outputs</b></p> <ul style="list-style-type: none"> <li>Follow instructions to build one of the machines from the LEGO WeDo activities, program the machine, develop the machine and the programming. EG Build the Giant Escape and program it to stand in response to a sensor then improve and extend the behaviour of the Giant Escape to tell a story - perhaps use Scratch to program your WeDo.</li> <li>Create, design, build and program a simple machine after being given a design brief. EG Make a barrier for a theme park that welcomes and counts the visitors.</li> <li>Use the Plant Care and House Security systems to experience a more sophisticated and complex programming scenario.</li> </ul>	<ul style="list-style-type: none"> <li>LEGO WeDo</li> <li>LEGO Mindstorms</li> <li>Control Station</li> </ul> <p>A pack of resources can be downloaded from the WL365 Computing Curriculum site.</p>
<b>CREATE!</b>	<p><b>Create an App / Game / Activity</b></p> <ul style="list-style-type: none"> <li>Develop programming skills to create an app, game or activity that is made available for use by peers.</li> </ul> <p><i>And do a COMPUTATIONAL THINKING activity away from the computer</i></p>	<ul style="list-style-type: none"> <li>2DIY</li> <li>2DIY 3D</li> <li>Scratch</li> <li>Textease Turtle</li> <li>Purple Mash – 2Code</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

DATA HANDLING and MULTIMEDIA: KEY STAGE 1		
<b>GRAPHS</b>	<b>Create charts and graphs</b> <ul style="list-style-type: none"> <li>• Create a Pictogram.</li> <li>• Create a Block Chart.</li> <li>• Create a Bar Chart.</li> </ul> <p>For example: collect data about minibeasts and show the data in a 2Count Pictogram</p>	<ul style="list-style-type: none"> <li>• 2Count</li> <li>• Purple Mash – 2Count</li> <li>• Purple Mash – 2Graph</li> </ul>
<b>DATABASES</b>	<b>Create a database</b> <ul style="list-style-type: none"> <li>• Create a shared database.</li> <li>• Sort and group the database.</li> <li>• Create graphs from the database.</li> </ul>	<ul style="list-style-type: none"> <li>• 2Investigate</li> <li>• Purple Mash – 2Investigate</li> </ul>
<b>STORIES</b>	<b>Create a multimedia story</b> <ul style="list-style-type: none"> <li>• Use text to annotate an image or series of images to ‘tell a story’.</li> <li>• Record your voice to ‘tell a story’.</li> <li>• Take photos or record video to ‘tell a story’.</li> <li>• Combine text / images / video / animation / sound to ‘tell a story’.</li> <li>• Create a ‘presentation’ that shows what you know about the technology around us.</li> </ul> <p>EG: Use ‘2 Create a Super Story’ to create a version of a traditional story in Literacy.</p>	<ul style="list-style-type: none"> <li>• 2 Paint</li> <li>• Textease</li> <li>• Podium</li> <li>• Puppet Pals</li> <li>• 2 Publish +</li> <li>• 2 Create a Super Story</li> <li>• Purple Mash</li> <li>• Powerpoint</li> <li>• Photostory</li> </ul>
<b>ANIMATE!</b>	<b>Create an animation</b> <ul style="list-style-type: none"> <li>• Create a simple show using characters and backgrounds in Puppet Pals.</li> <li>• Create a simple moving picture using 2Animate.</li> <li>• Create a stop frame animation using I Can Animate.</li> <li>• Add titles and sound to an animation using iMovie or Movie Maker</li> </ul>	<ul style="list-style-type: none"> <li>• Puppet Pals</li> <li>• Purple Mash - 2Animate</li> <li>• I Can Animate</li> <li>• iMovie</li> <li>• Movie Maker</li> <li>• J2E Spotlight</li> </ul>
DATA HANDLING and MULTIMEDIA: LOWER KEY STAGE 2		
<b>BRANCH!</b>	<b>Compare Creation of Branching Database Done Manually with Computer Generated</b> <ul style="list-style-type: none"> <li>• Pupils are taught the principles of how a branching database works. In pairs / small groups create a simple branching database about minibeasts or transport for example on paper or using cards. Create the same database using a computer program eg Textease Branch. Discuss which method of creating a branching database works best</li> </ul>	<ul style="list-style-type: none"> <li>• Textease or Easiteach Branch</li> </ul> <p>A pack of resources can be downloaded from the WL365</p>



# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>• Another user interrogates the database.</li> </ul>	Computing Curriculum site.
<b>SPREADSHEETS</b>	<b>Entering Data and using Simple Calculation Techniques</b> <ul style="list-style-type: none"> <li>• Learn the basic language and techniques in using a spreadsheet to organise and manipulate simple numerical data</li> <li>• Use the knowledge and techniques involved to create a spreadsheet to help plan and cater for a birthday party, run a school disco or tuck shop.</li> <li>• Another user tests the spreadsheet.</li> </ul>	<ul style="list-style-type: none"> <li>• Textease Spreadsheet</li> <li>• Excel</li> </ul> <p>A pack of resources can be downloaded from the WL365 Computing Curriculum site.</p>
<b>CREATE!</b>	<ul style="list-style-type: none"> <li>• Create a Multimedia Resource for a Younger Child</li> <li>• Pupils can create an interactive resource for a younger audience, eg an ebook, a game, a learning activity, a website, an entertainment video.</li> </ul>	<ul style="list-style-type: none"> <li>• Textease Publisher</li> <li>• 2 Create a Super Story</li> <li>• Photo Story</li> <li>• Book Creator</li> <li>• iMovie</li> </ul>
<b>DATA HANDLING and MULTIMEDIA: UPPER KEY STAGE 2</b>		
<b>DATABASES</b>	<b>Searching and Interrogating Databases</b> <ul style="list-style-type: none"> <li>• Searching and interrogating existing databases.</li> <li>• Creating a shared database and then searching or interrogating that database.</li> </ul> <p>EG: Criminal Records</p>	<ul style="list-style-type: none"> <li>• 2 Investigate</li> <li>• Textease Database</li> <li>• J2E Webforms</li> </ul>
<b>MODEL!</b>	<b>Spreadsheet Modelling</b> <ul style="list-style-type: none"> <li>• Create simple and more sophisticated spreadsheet models that are able to react when numerical data is added and / or updated. Examples – Simple price calculator, a bank account, a spreadsheet set up to calculate the amount of water used in a home, a spreadsheet set up to track the types of activities a group of pupils experience during a typical day / week, a spreadsheet showing relationship between areas and perimeters of rectangles.</li> <li>• Where appropriate create charts and graphs to illustrate patterns of information</li> </ul>	<ul style="list-style-type: none"> <li>• Textease Spreadsheet</li> <li>• Excel</li> </ul> <p>A pack of resources can be downloaded from the WL365 Computing Curriculum site.</p>
<b>BROADCAST!</b>	<b>Make and Promote a News Broadcast</b> <ul style="list-style-type: none"> <li>• Pupils create an audio or video broadcast as a news programme. Use the week's news from BBC Newsround or create local or school based news stories.</li> <li>• Pupils can create supporting resources such as a trailer, news jingles and also experience using autocue techniques.</li> <li>• Finished item to be made available on the school website or WL365 site.</li> </ul>	<ul style="list-style-type: none"> <li>• Podium Software</li> <li>• Audio Network</li> <li>• iMovie</li> <li>• Garage Band</li> <li>• I Can Present</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

DIGITAL LITERACY AND ONLINE TECHNOLOGIES: KEY STAGE 1		
<b>TECHNOLOGIES</b>	<b>Technology Around Us</b> <ul style="list-style-type: none"> <li>Identify, discuss and find out more about the technology that we can see in, around and outside the school building. Why is it there? How does it work?</li> <li>Identify and discuss the technology that we can see at home. Why is it there? How does it work?</li> </ul> Create a 'presentation' that shows what you know about the technology around us.	<ul style="list-style-type: none"> <li>Digital and non-digital resources</li> </ul>
<b>COMMUNICATE!</b>	<b>Using the Internet – email / message</b> <ul style="list-style-type: none"> <li>Send an email to an expert / organisation / partner school / school friend / Barnaby Bear</li> <li>Write or reply to an online discussion about a school activity.</li> <li>Create a post on a class blog.</li> <li>Video conference.</li> <li>Explore websites from a selection provided, rate the content of their preferred sites and explain why.</li> <li>Discuss different ways that you can navigate through websites, in particular – adverts, pop-ups, links.</li> <li>Show a selection of carefully chosen websites and ask about the intended audience. Discuss - some are aimed at older people, people with particular interests/hobbies etc. Discuss what to do if you come across something that gives you that funny feeling in your tummy.</li> <li>Show pupils the tomato spider website and discuss that anyone can set up a website, saying anything. What should they look out for?</li> </ul>	<ul style="list-style-type: none"> <li>WeLearn365 Email</li> <li>WeLearn365 Discussion Forum</li> <li>J2E Blog Post</li> <li>Facetime</li> <li>Skype</li> <li>Adobe Connect</li> <li>Common Sense Media:               <ul style="list-style-type: none"> <li>⇒ Going places safely</li> <li>⇒ Sites I like</li> </ul> </li> <li>NetsmartzKids</li> <li>Hector's World</li> <li>Webfronter Tomato Spider</li> </ul>
DIGITAL LITERACY AND ONLINE TECHNOLOGIES: LOWER KEY STAGE 2		
<b>WEBSITES</b>	<b>Computers and Networks: working with websites and pages</b> <ul style="list-style-type: none"> <li>Searching effectively</li> <li>Using non-linear information – navigating web content</li> <li>Reusing content on web pages – EG copy and paste an image from a website</li> </ul>	<ul style="list-style-type: none"> <li>Google</li> <li>Internet</li> </ul>
<b>COLLABORATE!</b>	<b>Online Collaboration – Pupils experience a range of online collaborative experiences (VC, Discussions, Shared Writing, Blogs, Wikis)</b> <ul style="list-style-type: none"> <li>Pupils experience a range of online collaboration scenarios building on what they may have done in key stage one.</li> </ul>	<ul style="list-style-type: none"> <li>WL365</li> <li>Purple Mash – 2Write</li> <li>J2E</li> </ul>
<b>THINK!</b>	<b>Making sense of online content</b> <ul style="list-style-type: none"> <li>Select a website and discuss what is fact, fiction and opinion.</li> </ul>	<ul style="list-style-type: none"> <li>Cyber Café</li> <li>Cybersmart – finding</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>• Recognise that information on websites may not be accurate or reliable and may be used for manipulation, persuasion or promotion of bias.</li> <li>• Create your own spoof website.</li> <li>• Be aware of online marketing and begin to develop strategies to deal with it. Use the Things for Sale lesson and examine websites which are designed to encourage purchase of specific products, recognise various methods used to promote and sell these products. Use Crayola.com and webkinz.com</li> <li>• Discuss what the words plagiarism and copyright mean.</li> </ul>	<p>appropriate content</p> <ul style="list-style-type: none"> <li>• Kara and Wilson Chap 2</li> <li>• Tree Octopus website</li> <li>• Common Sense Media:</li> <li>• Things for sale</li> <li>• Whose is it anyway</li> <li>• Rings of responsibility</li> </ul>
<b>DIGITAL LITERACY AND ONLINE TECHNOLOGIES: UPPER KEY STAGE 2</b>		
<b>NETWORKS</b>	<p><b>Computers and networks</b></p> <ul style="list-style-type: none"> <li>• Research the history of computers and networking. Present your findings to an audience in some way.</li> </ul> <p>EG <a href="https://showcase.lgfl.org.uk/Summary_page/Content/hoc.aspx">https://showcase.lgfl.org.uk/Summary_page/Content/hoc.aspx</a></p>	<ul style="list-style-type: none"> <li>• LGfL</li> </ul>
<b>COLLABORATE!</b>	<p><b>Online collaboration – Pupils experience a range of online collaborative experiences (VC, Discussions, Shared Writing, Blogs, Wikis)</b></p> <ul style="list-style-type: none"> <li>• Pupils experience a range of online collaboration scenarios building on what they may have done in lower key stage two.</li> </ul>	<ul style="list-style-type: none"> <li>• WL365</li> <li>• Purple Mash – 2Write</li> <li>• J2E</li> </ul>
<b>EVALUATE!</b>	<p><b>Making Sense of Online Content – Evaluating websites, assessing validity and reliability of web content</b></p> <ul style="list-style-type: none"> <li>• Pupils learn to discriminate about online content by considering how to assess information found on the internet and being able to evaluate websites.</li> <li>• Use the Alan November resources to check the validity of websites. Evaluate information found online and cross-reference to other websites.</li> <li>• Know that many commercial providers have sophisticated ways of trying to sell on the Internet (e.g. Hoax 'You have a virus' message to sell antivirus software).</li> <li>• What is spam – discuss reasons they may receive spam/junk emails etc. and use the scenarios in the lesson plan. Create a song similar to "spam stoppers".</li> </ul>	<ul style="list-style-type: none"> <li>• Hoax Websites</li> <li>• Website evaluation forms</li> <li>• Alan November: All About Explorers</li> <li>• WMnet: Mark's video – Keep Myself e-Safe</li> <li>• Common Sense Media – You've Won a Prize.</li> <li>• Check the Computing Curriculum site for example hoax sites and evaluation forms</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

E-SAFETY: KEY STAGE 1		
<b>SAFE</b>	<b>Use technology safely and respectfully</b> <ul style="list-style-type: none"> <li>• Agree on classroom expectations for the safe use of the Internet. Create a class e-safety charter. Use discussion, school council and feedback to class. Be aware of age appropriate content. Understand the school Acceptable Use Policy.</li> <li>• Recognise the difference between real and imaginary online experiences through role play.</li> <li>• Be kind and polite to people online as you are in real life. Read the Digiduck story to highlight how to behave online. Consider the feelings of others.</li> <li>• Identify some risks presented by new technologies inside and outside the school: online games, text messages or cyberbullying</li> <li>• Begin to understand that their work says something about themselves and so they should be careful when sharing it, eg photographs, text, blogs – use blogs/discussions/my profiles</li> </ul>	<ul style="list-style-type: none"> <li>• School AUP</li> <li>• Digiduck's Big Decision book</li> <li>• Lee &amp; Kim video</li> <li>• Zippep's Astro Circus online activity</li> </ul>
<b>ZIP!</b>	<b>Keeping personal information private and know where to go for help and support</b> <ul style="list-style-type: none"> <li>• Recognise the kind of information that is private. Talk about what information they should share with others and what they should not.</li> <li>• Understand that you should never give out private information on the Internet. Show Hectors World 1. Use technology toys, walkie talkies, mobile phones, talking tins to role play.</li> <li>• Understand that online communications are not always confidential and can be monitored.</li> <li>• Learn to create effective usernames that protect your private information. Use Hectors World or Skooville Password activity.</li> <li>• Understand that if you see something on the Internet which makes you feel uncomfortable or worried, you can tell an adult. Watch appropriate parts of Hectors World or Lee &amp; Kim videos and discuss safety and sharing with trusted adults.</li> <li>• Recognise who you can ask for help and know when you need help. Read Smartie The Penguin and consider good or bad choices.</li> </ul>	<ul style="list-style-type: none"> <li>• Commonsense Media <ul style="list-style-type: none"> <li>⇒ Keep it Private</li> <li>⇒ Powerful passwords</li> </ul> </li> <li>• Cybersmart – Sharing Personal Information</li> <li>• Zip It – from Zip It, Block It, Flag It</li> <li>• Hectors world 1, 3 &amp; 5</li> <li>• Skooville.com</li> <li>• What makes a good password?</li> <li>• About me.</li> <li>• Childnet: Smartie the Penguin</li> <li>• Lee &amp; Kim video</li> </ul>
E-SAFETY: LOWER KEY STAGE 2		
<b>SMART</b>	<b>Use technology safely, respectfully and responsibly</b> <ul style="list-style-type: none"> <li>• Understand the need for rules. Create a game to highlight the e-safety rules/charter that has been agreed by the class/school.</li> </ul>	<ul style="list-style-type: none"> <li>• Cyber Café</li> <li>• DigitalMe Safe</li> <li>• ICO.org</li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>• Understand that any personal information online can be used and seen by others. What can you find out about a famous person? Demonstrate safe practice and know what to include/leave out when setting up an online profile. Look at aliases and avatars.</li> <li>• Understand the need to identify whether material can be shared before using it in their work. Look at a range of royalty free websites.</li> <li>• Know to keep personal information private when communicating online.</li> <li>• 'How secure is my password' website.</li> </ul>	⇒ Lesson 1 ⇒ Lesson 2 • Commonsense Media: Power of Words
<b>FLAG!</b>	<b>Recognise acceptable/unacceptable behaviour. Know a range of ways to report concerns about content and contact</b> <ul style="list-style-type: none"> <li>• Know that they can use online tools to collaborate and communicate with others.</li> <li>• Understand that there are various ways of reporting concerns               <ul style="list-style-type: none"> <li>⇒ Online – CEOP</li> <li>⇒ Adult – Parent/carer/teacher/TA</li> <li>⇒ Phone – Childline</li> <li>⇒ School based system – email/worry box/school council or e-safety committee</li> </ul> </li> <li>• Know how to deal with unpleasant communications via mobile, text, chat rooms (save the message and show to a trusted adult). Know there are writing conventions for electronic communications.</li> <li>• Understand you should only befriend people you know in real life. Friendbook activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Blogs, forums, online games, email.</li> <li>• CEOP</li> <li>• Kara and Crew 4</li> <li>• Childline</li> <li>• Commonsense media               <ul style="list-style-type: none"> <li>⇒ Show respect</li> <li>⇒ Writing good emails</li> </ul> </li> <li>• Cybersmart: Positive online communication</li> <li>• ICO.org Lesson 4</li> </ul>
<b>E-SAFETY: UPPER KEY STAGE 2</b>		
<b>RESPECT!</b>	<b>Use technology safely, respectfully and responsibly</b> <ul style="list-style-type: none"> <li>• Talk about the risks of not following the rules/charter. Provide some guidelines for younger members of the school community.</li> <li>• Demonstrate safe practice when selecting images/content for uploading to a personal profile or online space.</li> <li>• Consider the information that you may share and the impact it can have on others.</li> <li>• Understand the importance of creating a positive digital footprint and the need to help others preserve theirs.</li> <li>• Know that they need to be careful about downloading files and games from the Internet. Create a song or rap.</li> <li>• Awareness of the need to check for copyright when downloading content from the Internet: when can this be legally used; how to give credit.</li> </ul>	<ul style="list-style-type: none"> <li>• TUK Cyber Café: Help Sam</li> <li>• DigitalMe Safe</li> <li>• NGfL Wales: Mobile Phone Activity</li> <li>• Cybersmart – Sharing personal information</li> <li>• ICO.org Lesson 2</li> <li>• Commonsense media               <ul style="list-style-type: none"> <li>⇒ Power of Words</li> <li>⇒ Picture perfect</li> <li>⇒ How to cite a site</li> <li>⇒ Password</li> </ul> </li> </ul>

# PRIMARY COMPUTING CURRICULUM OVERVIEW

	<ul style="list-style-type: none"> <li>• Review the purpose of passwords and what makes them strong.</li> <li>• Consider the differences between different social networking sites and the Learning Platform (a closed learning environment). Discuss the risks.</li> </ul>	<ul style="list-style-type: none"> <li>• CBBC Horrible Histories: <ul style="list-style-type: none"> <li>⇒ Saxon Monk</li> <li>⇒ Lady Jane Grey</li> <li>⇒ Take Care with Bobby Lockwood</li> </ul> </li> <li>• ICO.org Lesson 1</li> <li>• CBBC - Mama said song</li> <li>• WMNet: Ahmet's Story</li> <li>• Cyber Café lesson 9</li> </ul>
<b>CONTACT!</b>	<p><b>Recognise acceptable/unacceptable behaviour and know a range of ways to report concerns about content and contact</b></p> <ul style="list-style-type: none"> <li>• Discuss: everyone has the right to be safe and happy online and know they are responsible for reporting what upsets them. Make up an animation or presentation to illustrate.</li> <li>• Understand that some Internet material (eg games) is age related and the implication of ignoring such guidance.</li> <li>• Create your own profile and consider what is safe and not safe to share.</li> <li>• Plan and deliver an assembly to be shared with other pupils and parents.</li> <li>• Understand the implications of appropriate online behaviour and that bullying is unacceptable. Know when to report an incident.</li> </ul>	<ul style="list-style-type: none"> <li>• Blogs, forums, online games, email.</li> <li>• CEOP</li> <li>• Kara and Crew 4</li> <li>• Childline</li> <li>• DigitalMe Safe</li> <li>• ICO.org Lesson 4</li> <li>• Skoodle lesson 3: Conversations and resources</li> <li>• Common sense media: Cyberbullying</li> <li>• CBBC Horrible Histories: Prudish Victorians</li> </ul>