Computer Science	Year 4 Expectations	Activity Ideas
• 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 www; and the opportunities they offer for communication and collaboration.	• Deconstruct a program • Use a series of conditions to trigger different events. • Use a series of IF THEN conditions to control events • Use sensing proximity/user input • Variables- scoring system- set, change, show and hide to control variables. • Set the appearance of an object and create a series of changes after a specified amount of time or user input. • Create and test a range of coordinates to control movement. • Change the shade of pen used considering the look it will create. • Predict the behaviour of simple programs. Use the comment box in Scratch. • () + () • () – () • () * () • () / ()	**Slug trail** 7 sessions AG 7th Jan- 25th Feb Slug trail to cover objectives + introduction of obstacles to use coordinates. Train your computer to do maths- project.

Hardware Investigation

- Able to name the different parts of a desktop computer.
- Know what the function of the different part of a computer is.
- Understand the differences between the web and the internet.
- Understand differences between software and hardware.
- Understand what a network is.

Multimedia and Data Handling	Year 4 Expectations	Resources
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.	• Show increased confidence in creating and modifying text and presentation documents for a purpose. • Use online tools to modify photos/videos. • Use bullet points. • Use spell check. • Use transitions and hyperlinks • Critique own work and work of others. • Understand search engines rank pages according to relevance.	**4.3 We are musicians**- Therese 'producing digital music'- 'GarageBand' APP or Audacity or PurpleMash **4.4 We are HTML editors** **4.6 We are Meteorologists** (or relevant subject matter) April 29th-July end of term (E.g. In 4.3, compose original music for a particular purpose. In 4.4, create web content through writing HTML code for a particular purpose. In 4.5, contribute content to a wiki for a particular purpose. In 4.6, create a presentation on the weather.) **4.5 We are co-authors** (Vikings ?) Teachers possible Thursday morning support from AG 2Write, 2Connect,2Blog www.purplemash.com/#jsapps/write www.purplemash.com/#app/tools/2Connect • Use the collaborative functionality of 2Write and 2Connect to brainstorm and share ideas on developing a wiki www.purplemash.com/#app/link/2blog • Use 2Blog to create and share a wiki on your chosen topic • Include links to your 2Connect document and/or other Purple Mash work • Teachers create a class blog, decide who can see, post or comment • Share your wiki blog with other classes and/or friends/family How to use 2Blog: www.purplemash.com/manuals/2blog/index.html Meteorology project Decibel sound project.
	• Create tables, more advanced bar graphs, pie charts, basic line graphs and use formula to generate spread sheets. • Use data logger to record and compare readings.	

Online Safety and Technology in Our Lives	Year 4 Expectations	Resources

• Use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.
• Recognise common uses of information technology beyond school.
• Understand the opportunities networks offer for communication and collaboration.
• Be discerning in evaluating digital content.
	• Know who to talk to about concerns and inappropriate behaviour at home or in school.
	
	• The child can understand the difference between acceptable and unacceptable behaviours when using digital technology.
	
	• Able to plan a range of resources to help parents and children understand online safety.
	
	• Identify key words to search for information.
	
	HTML
	  • Understands HTML forms basis of webpages.
	  • Can form web pages using text and images.
	  • Can create own web page
	  • Can create own e-card in HTML
		.
		E.g. Know to tell a teacher about any concerns or inappropriate behaviour in any units. Know that concerns in relation to the Scratch community can be reported to the community moderators (units 4.1 and 4.2). Know that they should talk to trusted adults about concerns and inappropriate behaviour outside school + AG 7 and 21st September +Teachers
		
		In 4.1 and 4.2, know the difference between acceptable and unacceptable behaviour in the Scratch community. In 4.4, know the difference between acceptable and unacceptable web pages and remixes, recognising what constitutes parody or fair use. In 4.5, recognise the difference between acceptable and unacceptable behaviour in a class wiki or on Wikipedia.)+ AG 7 and 21st September +Teachers
		In 4.3, act responsibly when creating their music . In 4.4, take care to act responsibly when creating or remixing web pages, including observing copyright. In 4.5, contribute positively to the class wiki.) + AG 7 and 21st September +Teachers
		
		Purple Mash - produce a leaflet Teachers + Safer Internet Day 5th February + summer term. Link to a class assembly?
		
		AG will give you updated resources to use for Safer Internet Day nearer the time.
		
		6 Sessions AG 29th Oct- 10th Dec HTML Project