Year 4 Computing Subject Map

DRIVER WORDS

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5
Describe, Perform, Record, Explore, Create, Identify	Sequence instructions, Control devices, Classify, Represent data, Retrieve, Recognise e-safety issues	Plan, Construct, Record, Save, Retrieve, Use different kinds of data, Understand protection of personal information	Create algorithms, Explain, Modify, Search, Publish, Communicate, Understand password security	Apply, Understand input and output, Programme, Create Sequences, Evaluate, Select appropriate software, Understand the risks and benefits of the internet	Design, Create, Test, Refine, Improve, Be selective, Critically evaluate, Understand how to deal with cyber bullying effectively

AGE RELATED EXPECTATIONS

	COMPUTER SCIENCE		INFORMATION TECHNOLOGY		DIGITAL LITERACY/INTERNET SAEFTY
Algorithms, problem solving and reasoning	1. Design and write a program using a block language to a given brief, including simple interaction (programs to include variables, stages, artificial intelligence and a scoring system). 2. Use sequence and repetition in programs. 3. Write a program that accepts keyboard input and produces on-screen output. 4. Develop their own simulation of a simple physical system on screen.	*Digital Productivity, Creating Content*	11. Use and combine a range of programs on a computer. 12. Design and create content on a computer in response to a given goal. 13. Collect, analyse and present data.	*Safe Use*	15. Demonstrate that they can act responsibly when using computers. 16. Identify and explain the differences between acceptable and unacceptable behaviours when using digital technology. 17. Know who to talk to about concerns and inappropriate behaviour at home or in school.
Logical Reasoning	5. Use logical reasoning to detect and correct errors in programs. 6. Explain an algorithm using sequence and repetition in their own words.	*Searching*	14. Use a standard search engine to find information using a range of strategies to be more successful in finding reliable information.	*Uses beyond school*	18. Collaboratively communicate with peers on a shared wiki appropriately. 19. Begin to use a range of online communication tools, such as forums, email and polls in order to formulate, develop and exchange ideas.
Networks and Search engines	7. Use and explain how search engines work. 8. Explain how the internet makes the web possible. 9. Understand that search engines rank pages according to relevance. 10. Create a webpage and explain how web pages are created and transmitted.			*Digital Creativity*	20. Decide whether digital content is relevant for a given purpose or question. 21. Describe the meaning of copyright and the importance of acknowledging sources.

COMPUTING VOCABULARY

Algorithm, block, language, collaboration ,debug, encrypted ,execute, HTTP, loops, manipulate ,organise, program ,repetition ,scripted ,selection ,sequence ,simulation ,sprite, software, store, packets of data, physical, system , retrieve, reverse, engineer, URL , cached, collecting data, digital content, network, safe, search, mode, search technologies, server, acceptable/unacceptable behaviours, command ,evaluating, personal information, private, world wide web app/application, command, computer, data, device, digital, download, home button, input, internet, iPad, laptop, log in/on, Online safety, output, password, program, record, save, tablet, tap, type, username