Year 5 Computing Subject Map

DRIVER WORDS						
EYFS	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Year 6*
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	Debug, Solve problems, Work with variables, Use logical reasoning, Detect and correct errors, Plan, Design, Combine software, Use technology safely

AGE RELATED EXPECTATIONS					
COMPUTER SCIENCE		***INFORMATION TECHNOLOGY***		***DIGITAL LITERACY/INTERNET SAEFTY***	
Algorithms, problem solving and reasoning	1. Design, write and debug a program using a block language based on their own ideas (programs to include multiple sprites, multiple variables, sensors and conditional statements). 2. Use sequence, selection and repetition in programs. 3. Write a program that accepts keyboard and mouse input and produces output on screen and through speakers. 4. Develop their own simple computer control application. 5. Plan a solution to a problem using decomposition.	*Digital Productivity, Creating Content*	11. Use and combine a range of programs on multiple devices. 12. Design and create programs on a computer in response to a given goal. 13. Analyse and evaluate information.	*Safe Use*	16. Demonstrate that they can act responsibly when using the internet. 17. Discuss the consequences of particular behaviours when using digital technology. 18. Know how to report concerns and inappropriate behaviour in a range of contexts. 19. Decide whether digital content is reliable and unbiased.
Logical Reasoning	6. Explain a rule-based algorithm in their own words. 7. Use logical reasoning to detect errors in algorithms.	***Searching***	14. Use filters to make more effective use of a standard search engine. 15. Understand that search engines use a cached copy of the crawled web to select and rank results.	*Uses beyond school*	20. Work collaboratively with peers on a class website or blog.
Networks and Search engines	8. Explain how search engines are ranked. 9. Understand how data routing works on the internet. 10. Explain how web pages are created and transmitted in their own words.			*Digital Creativity*	21. Explain what is meant by copyright

COMPUTING VOCABULARY
Algorithm, block, language, command, control, collaboration, debug, decomposition, encrypted, execute, HTTP, loops, manipulate, organise, repetition, scripted, selection, sequence, simulation, sprite, software, store, packets of data, physical system, retrieve, reverse, engineer, URL, variables, cached, collecting, data, digital content, evaluating, network, safe, search, mode ,search technologies, server, software, acceptable/unacceptable behaviours, encryption, 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, out-