

Computing 2016-17: Overview

YEAR 5 : Overview of Curriculum

Autumn	Using the Network/ Keyboard Skills	Initial lessons will be familiarisation with the school network; logging in; storing and accessing information; behaviour in the ICT Suite EnglishType software – begin use of this to improve keyboard skills. To continue throughout the term, with subsequent lessons using typing practice at the start of the lesson before moving on.	
	Esafety	<ol style="list-style-type: none"> 1. Passwords - Understand why we don't share passwords 2. Cyberpeople - Understand how little we know about those we communicate with online 3. Have Your Say - understand that communication without sound and facial context can be perceived very differently from how it was intended. 4. Keeping Identity Private- Learning to keep personal information online private 5. Mobile Phone Use - To discuss mobile phone ownership and etiquette. 	
	Network, Internet and Web Search	<ol style="list-style-type: none"> 1. How the internet works 2. Connecting the internet 3. Packets 4. Tracing the internet 5. Linking the web 	** some of these are unplugged activities
Spring	Coding	<p><u>Introduction</u></p> <p>Folder: 'Introducing Algorithms' Use either 'Playground Games Plan' or 'Drawing Instructions'. Both could be used if reinforcement is needed.</p> <p><u>Lightbot</u></p> <p>Show pupils how this works. They then continue and complete the levels independently – they should be allowed to discuss with each other how to solve some levels if they wish, but must not be allowed to just give each other an answer to a level.</p> <p>Some levels could also be worked through a whole-class activity, or levels could be completed for homework.</p>	
	Scratch	<p>The focus for this scheme needs to be on children's understanding of how programs work: that computers follow instructions; that the instructions need to be logical; that if the outcome is not as expected then there is an error in the program which must be debugged.</p> <p>Encourage pupils to experiment and explore – they will learn more from what goes wrong than from getting things right first time, but they must try to figure out where the error is for themselves if they can.</p> <p>Scratch Animated Stories Unit Pack</p>	

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Summer	Scratch	Perimeter Odd Even Maths Quiz
	Databases	Databases in the real world – Introduction: How a bank works (unplugged activity) Remaining scheme Introduction to Databases

YEAR 6 : Overview of Curriculum.

Autumn	Internet	Information Detectives – effective searching Some links on this scheme were not working last year. I have updated all the errors I could find but staff should check before using the resource. DNS Game
Spring	Scratch	Review basic commands in Scratch. Pupils will have varying levels of competence from last year. Activities: <ul style="list-style-type: none"> • Crab Maze and/or Snail Trail as considered appropriate • Game Maker • Counting Machine • Times Tables
Summer	Powerpoint	Two projects to develop Powerpoint skills: <ol style="list-style-type: none"> 1. The simpler of these is a Maze game. All classes can begin with this. (See Maze Tutorial for instructions). 2. A more challenging project is Escape the Room <p>Both show pupils how to use a range of tools in Powerpoint which they may not have used before. They also need to think logically about how to progress the game to make each level more challenging, and (with Escape the Room) what sequence of steps need to be completed before escape is possible.</p>
		Prezi vs Powerpoint

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YEAR 7 : Overview of Curriculum

Autumn	How Computers Work	Hardware and types of software
	Searching for Information	Using search engines effectively
Spring	Coding	Scratch: Coin Sort; Clock; Pacman; designing own game in Scratch
Summer	Introduction to Python	<p>BBC micro:bit 6 lessons using Python mu (2016-17 only) <i>Pupils to keep micro:bit after completion</i></p> <p>Further activities with micro:bit are available on BBC website: https://www.microbit.co.uk/</p>

YEAR 8 : Overview of Curriculum

Autumn	Business Project	Consider and apply the use of software in the launch of a new cereal product
	Esafety	<p>Social Network Detectives (1 lesson) Digital Values (1 lesson) Online safety board game</p>
	Cryptography	<p>Preparation for coding scheme (Python) – covers the use of various codes, and aims to develop logical thinking. Some work will have been done in Y7 on binary. Various resources in Cryptography folder, to use/adapt to suit.</p>
Spring	Python	<p>Code Combat Code Academy - 36 interactive lessons</p>