

Year 7 *Computing*– Long Term Plan 2018-19

	Week 1 3 Sept.	Week 2 10 Sept.	Week 3 17 Sept.	Week 4 24 Sept.	Week 5 1 Oct.	Week 6 8 Oct.	Week 7 15 Oct.	Week 8 22 Oct.
Term 1	Logins School Expectations	e-safety	Stranger Danger Online Bullying	1st to a Million Sexting	Phishing Malware Viruses Trojans Firewalls	Synoptic Test Bias & Reliability	Revision and consolidation Trust Revision booklets. Copyright/Sources/Plageri sum	Synoptic Test Computational Thinking
	Week 1 5 Nov.	Week 2 12 Nov.	Week 3 19 Nov.	Week 4 26 Nov.	Week 5 3 Dec.	Week 6 10 Dec.	Week 7 17 Dec.	
Term 2	Decomposition	Synoptic Test Pattern Recognition	Synoptic Test Abstraction	Synoptic Test Algorithms	Synoptic Test Evaluating Solutions	<i>PRAG Progress week Consolidation Tests</i>	Hour Of Code	
	Week 1 7 Jan.	Week 2 14 Jan.	Week 3 21 Jan.	Week 4 28 Jan.	Week 5 4 Feb.	Week 6 11 Feb.		
Term 3	Hardware Computer Devices Hardware/Softw are Storage	Logic & Logic gates	Synoptic Test Software Application Software	Systems Software Interfaces Synoptic Test	Revision and consolidation Trust Revision booklets. Consolidation Tests	CPU CPU Components		
	Week 1 25 Feb.	Week 2 4 Mar.	Week 3 11 Mar.	Week 4 18 Mar.	Week 5 25 Mar.	Week 6 1 April		
Term 4	Clock Speed Cores Cache	FDEC	Synoptic Test Introduction Networks	WAN/LAN Star/Ring/Bus Advantages & Disadvantages Ping/Traceroute	<i>PRAG Progress week Consolidation Tests</i>	Search Engines Synoptic Test		
	Week 1 22 April	Week 2 29 April	Week 3 6 May	Week 4 13 May	Week 5 20 May			
Term 5	Binary Binary to Denary	Denary to Binary	Binary Addition Overflow	Revise, review and Improve Synoptic Test Trust Revision booklets	Representing text, images and sound Synoptic Test			

	Week 1 3 June	Week 2 10 June	Week 3 17 June	Week 4 24 June	Week 5 1 July	Week 6 8 July	Week 7 15 July
Term 6	Impact on Society Long answer questions	Impact on Society Legal Long answer questions	.Revision	Assessment weeks 3 GL Exam	Assessment weeks 3 Exam Duke of York Award	Duke of York Award	Duke of York

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	Week 1 3 Sept.	Week 2 10 Sept.	Week 3 17 Sept.	Week 4 24 Sept.	Week 5 1 Oct.	Week 6 8 Oct.	Week 7 15 Oct.	Week 8 22 Oct.
Term 1	Introduction to programming theory	Creating a program from an algorithm	Synoptic Test Programming Arithmetic	Test Variables Naming rules	Data Types Working with Variable	Working with Strings Input & Output Theory		Test
Term 2	Sequence Selection Iteration	If -else elif	Synoptic Test Iteration For Loops	While Loops & Errors	Infinite Loops Synoptic Test Logic	<i>PRAG Progress week Battery Tests</i>	Duke of York	
Term 3	Boolean Logic	Boolean Expressions	Programming using comparative operators task	Using AND	Using OR	Using NOT Synoptic Test		
Term 4	Arrays & Lists	Arrays and Lists Synoptic Test	Procedures, Functions and Calls	Procedures, Functions and Calls	<i>PRAG Progress week Synoptic Test</i>	Errors and Documenting Code		
	Week 1	Week 2	Week 3	Week 4	Week 5			

	22 April	29 April	6 May	13 May	20 May		
Term 5	Comments and Documentation Synoptic Test	Algorithms Designing	Pseudocode Flowcharts	Flowcharts 2 Synoptic Test	Searching Serial Binary Comparison		
	Week 1 3 June	Week 2 10 June	Week 3 17 June	Week 4 24 June	Week 5 1 July	Week 6 8 July	Week 7 15 July
Term 6	Sorting Bubble Bucket Comparison Synoptic Tests (Sorting & Searching)	Selection Algorithm Pseudocode Flowchart & Code Synoptic Tests	Selection Algorithm Pseudocode Flowchart & Code Synoptic Test	Logical Reasoning Revision Battery of Tests	<i>PRAG Progress week</i> <i>Ethics</i>	Legislation	Hour of Code Duke of York

1. Grade 8

1.1 To achieve grade 8 candidates will be able to:

- demonstrate relevant and comprehensive knowledge and understanding of fundamental concepts and principles including digital systems and societal impacts
- effectively apply fundamental concepts, principles and mathematical skills, using sustained analytical, logical and evaluative computational thinking, to a wide range of complex problems
- develop and refine a complete solution that meets the requirements of a substantial problem

2. Grade 5

2.1 To achieve grade 5 candidates will be able to:

- demonstrate mostly accurate and appropriate knowledge and understanding of fundamental concepts and principles including digital systems and societal impacts
- appropriately apply fundamental concepts, principles and mathematical skills, using analytical, logical and evaluative computational thinking, to a range of problems
- produce a working solution that meets most requirements of a substantial problem

3. Grade 2

3.1 To achieve grade 2 candidates will be able to:

- demonstrate limited knowledge and understanding of fundamental concepts and principles including digital

systems and societal impacts

- apply fundamental concepts, principles and mathematical skills, using basic analytical and logical computational thinking, to straightforward problems with limited accuracy
- produce a partially working solution that meets some requirements of a substantial problem