

TNHA Curriculum Planning Document

Subject: Computer Science

Year: 10



Timescale	Autumn			Spring			Summer		
Prior Learning (from KS2/3)	None	None	None	None	None	None	None	None	None
Topic/ Unit title	Algorithms 1 – Top down Design, Flowcharts and Pseudocode	Algorithms 2 – Searching and Sorting	Programming 1 – Input/Output, Operators, Variables, Data types, String Operations	Programming 2 – Subroutines, Sequence, Selection, Iteration, Importing modules.	Programming 3 – Scope, Data Structures,	Programming 4 – Files, Validation Techniques, Errors and Testing.	Controlled Assessment	Controlled Assessment	Controlled Assessment
SMSC/Cultural Capital/Character/FBV-outline specific areas that are covered in this unit	Consider their place in a technical world, how they are better than computers in most regards but also understand their own limitations. How problem solving through algorithmic design can be related to non computing related problems. Group work.	Consider their place in a technical world, how they are better than computers in most regards but also understand their own limitations. How problem solving through algorithmic design can be related to non computing related problems. Group work.	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs	Must reflect upon own learning to create imaginative programming solutions and also have links to actual programming jobs
Assessment Opportunities	<p>Each Topic is assessed by an end of topic test.</p> <p>During the year students will be assessed on their programming skills also.</p> <p>Limited scope for assessment for controlled assessment due to controlled nature of assessment.</p>								
Links to other units in KS3/4.	Y10 – Programming (all)	Y10 – Programming (all)	Y10 – Algorithms 1	Y10 – Algorithms (all) Y10 – Programming 1	Y10 – Algorithms (all) Y10 – Programming 1-2	Y10 – Algorithms (all) Y10 – Programming 1-3	Y10 – Algorithms (all) Y10 – Programming (all)	Y10 – Algorithms (all) Y10 – Programming (all)	Y10 – Algorithms (all) Y10 – Programming (all)

Determined to be the best we can be...

#theTNHAWay



TNHA Curriculum Planning Document

Subject: Computer Science

Year: 11

Timescale	Autumn			Spring			Summer		
Prior Learning (from KS2/3)	None	None	None	None	None	None	None	None	None
Topic/ Unit title	Y10 Algorithms and Programming Theory recap	Data Representation	Computer Systems	Networks	Cyber Security	Consequences of Technology	Revision of all topics and past papers.		
SMSC/Cultural Capital/Character/FBV-outline specific areas that are covered in this unit	Must reflect upon own learning to create imaginative algorithmic solutions and also have links to actual programming jobs	Consider their place in a technical world, how they are better than computers in most regards but also understand their own limitations.	Consider their place in a technical world, how they are better than computers in most regards but also understand their own limitations.	Ethical and legal use of technology. The increasing use of technology at the expense of human labour and freedoms.	Ethical and legal use of technology.	Ethical and legal use of technology. The increasing use of technology at the expense of human labour and freedoms. Ethical use of technology including conservation and the effect on less developed countries.			
Assessment Opportunities	Each Topic is assessed by an end of topic test.								
Links to other units in KS3/4.	Y10 – Algorithms (all) and Programming theory (no programming)	None	Data Representation	None	None	Y11 – Computer Systems, Networks, Cyber Security	Y10 – All Y11 - All		

Determined to be the best we can be...

#theTNHAWay