

High Tunstall College of Science Curriculum Intent

Topic:	Application of Computational Thinking	Year:	10	Half Term:	3
	Topic 1 and Topic 6: Problem Solving with Programming				
	Subprograms				

	Progress		
Key Ideas	R	Α	G
I understand the difference between a 'data structure', an 'array' and a 'list'			
I am able to access each item in a list using indexing			
I can create, append, and delete items from a list			
I can explain that the 'range' function generates a sequence of numbers			
I can use the iteration 'for' to process every item in a one-dimensional data structure			
I can define the term 'procedure'			
I can define the term 'parameter'			
I can create procedures			
I can define the term 'function'			
I can define the term 'return value'			
I can create functions			
I can use 'separation of concerns'			

Lesson L	Learning Focus	Assessment	Key words
1 C	Define the terms 'data structure', 'array' and 'list' Access each item in a list using indexing Create, append, and delete items from a list	Evidence in Teams End of topic assessment	Append, Array, Data structure, Delete, Element, Indices, Integer, List, Metadata, Remove, Square brackets, String, Variable,
2 E n L	Explain that the 'range' function generates a sequence of numbers Use the iteration 'for' to process every item in a one-dimensional data structure	Evidence in Teams End of topic assessment	Condition-controlled, Count- controlled, Flowchart, For loop, Iterate, List, Parameters, Range, Start-Stop-Step, While loop,
3 C	Define the term 'procedure' Define the term 'parameter' Create procedures	Evidence in Teams End of topic assessment	Append, Arguments, Call, Comments, Def, Define, Delete, Functions, IDE, Parameter, Print, Procedure, Remove, Repetitive, Return,
4 C	Define the term 'function' Define the term 'parameter' Define the term 'return value' Create functions	Evidence in Teams End of topic assessment	Built-in functions, Function, Parameter, Procedure, Return value, Sub-program, Variable
5 C	Create functions Create procedures Use 'separation of concerns'	Evidence in Teams End of topic assessment	Development, Flowcharts Function, Interface, Maintenance, Procedure, Separation of concerns, Sub- programs
6 F			
	Revision lessons	Evidence in Teams End of topic assessment	All of the above
7 E	Revision lessons End of topic Assessment	Evidence in Teams End of topic assessment End of topic assessment	All of the above

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