



High Tunstall College of Science Curriculum Intent

Topic:	Programming Skills	Year:	11	Half Term:	3
--------	--------------------	-------	----	------------	---

	Progress		
Key Ideas	R	A	G
I can format output to meet requirements			
I can format output suitable for the end user			
I can define the term 'array'			
I can define the term 'list'			
I can give characteristics of one-dimensional and two-dimensional data structures			
I can use indexing to access any item in a two-dimensional structure			
I can use 'for' to iterate over every item in a two-dimensional structure			
I can validate input using presence check, length check, range check, and look-up check			
I can apply a linear search to a one-dimensional list (paper)			
I can complete a linear search algorithm in a flowchart			
I can write a linear search for a single item in a one-dimensional list (code)			
I can apply a linear search to a two-dimensional list (paper)			
I can complete a linear search algorithm in a flowchart			
I can write a linear search for a single record in a two-dimensional list (code)			

Lesson	Learning Focus	Assessment	Key words
1 CT19	Format output to meet requirements Format output suitable for the end user	OneNote work Forms Assessment	Format, Iterate, string.format(), User-friendly,
2 CT20	Define the term 'array' Define the term 'list' Give characteristics of one-dimensional and two-dimensional data structures Use indexing to access any item in a two-dimensional structure Use 'for' to iterate over every item in a two-dimensional structure	OneNote work Forms Assessment	Lists, Loop, Nest, One-dimensional list, Records, Table, Two-dimensional list,
3 CT21	Validate input using presence check, length check, range check, and look-up check	OneNote work Forms Assessment	Invalid, Length check, Look-up check, Presence check, Range check, Selection, Validation, Whitelist
4 CT22	Apply a linear search to a one-dimensional list (paper) Complete a linear search algorithm in a flowchart Write a linear search for a single item in a one-dimensional list (code)	OneNote work Forms Assessment	Dry-run, Flowchart, Input, Linear search, Searching
5 CT23	Apply a linear search to a two-dimensional list (paper) Complete a linear search algorithm in a flowchart Write a linear search for a single record in a two-dimensional list (code)	OneNote work Forms Assessment	Columns, Databases, Flowchart, Linear search, Record, Rows, Two-dimensional,
6 CT24	End of topic Assessment	OneNote work Forms Assessment	All of the above