**Flowcharts and Pseudocode 2**

1.  Write the definition of **algorithm**.

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2.  List the three characteristics of a good algorithm – in a word, then explain the meaning.

| | | |
|---|---|---|
| a) | | |
| | | |
| b) | | |
| | | |
| c) | | |
| | | |

3.  The logical flow in a flowchart is represented by arrows. Draw and label the five blocks essential for the Pearson Edexcel International GCSE Computer Science exam.

| | Diagram | Name | | Diagram | Name |
|---|---|---|---|---|---|
| a) | | *start / end* | d) | | |
| b) | | | e) | | |
| c) | | | | | |

4.  Draw and label the flowchart representation of the three programming *constructs* you were taught in this course.

| a) | b) | c) |
|---|---|---|
| | | |

5.  Write the vocabulary word meaning: an expression that evaluates to either true or false.

|  |
|---|
|  |

6. Write the correct vocabulary word next to the box that best describes it. If you spell the word incorrectly, you will need to write the word ten times before you receive credit.

| *abstraction* | *algorithm* | *constant* | *construct* | *decompose* | *flowchart* | *pseudocode* | *variable* |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| a) | | a diagrammatic representation of an algorithm |
| b) | | a memory location that stores an unchangeable value |
| c) | | breaking down a complex problem into smaller, more manageable parts |
| d) | | a structured, code-like, high-level description of an algorithm |
| e) | | a memory location to store a value that may change while the program is running |
| f) | | a precise method for solving a problem |
| g) | | a smaller part used as a building block |
| h) | | hiding complexity by focusing on the essential features of a problem |

7. Given an array, `names`, that contains values, such as:

    SET names TO [ 'Eason','Ethan', 'Sarah', 'Ruby' ]

a) Write Pearson pseudocode using a count-controlled `FOR` loop to print the names to the display. The code must be able to handle different lengths of arrays.

b) Write code that produces exactly the same results, but uses a `FOR EACH` loop.

c) Explain why the count-controlled repeat loop is not ideal for this task.
   (REPEAT <number> TIMES…)