

**Worksheet: Unit 1 Review**

1. Copy each vocabulary word once into each box to the right of it, then copy the definition of each vocabulary word once into the box(es) below it. Be sure you understand the definition.

|  |                 |  |  |  |  |  |
|--|-----------------|--|--|--|--|--|
| a)   | <b>coercion</b> |  |  |  |  |  |
| In general, coercion is getting someone to do something through force, threats, or pressure. |                 |  |  |  |  |  |
|  |                 |  |  |  |  |  |
| In computer science, coercion is changing from one data type to another.                     |                 |  |  |  |  |  |
|  |                 |  |  |  |  |  |
| An example of type coercion is changing a real number to an integer.                         |                 |  |  |  |  |  |
|  |                 |  |  |  |  |  |

2. Write the appropriate vocabulary word next to its definition.

|    |  |   |
|----|--|---|
| a) |  | clear and precise with only one possible interpretation               |
| b) |  | a smaller part used as a building block                               |
| c) |  | an expression that evaluates to either <i>true</i> or <i>false</i>    |
| d) |  | an unambiguous sequence of steps to solve a problem or perform a task |
| e) |  | hiding complexity by focusing on the essential features of a problem  |
| f) |  | breaking down a complex problem into smaller, more manageable parts   |

3. We have discussed three programming constructs in this course. Write each vocabulary word next to its definition.

|    |  |  |
|----|--|--|
| a) |  | executing instructions one after the other   |
| b) |  | allows a choice between alternatives;<br>in a program, this is a <i>branch</i> based on a <i>condition</i> |
| c) |  | repeating a set of instructions until a condition is met or for a specific number of times                 |

4. We have discussed three points to consider when deciding whether an algorithm is successful. Write each vocabulary word next to its definition

|    |  |   |
|----|--|---|
| a) |  | producing the correct outcome with no errors                            |
| b) |  | producing the same outcome from the same input                          |
| c) |  | achieving the outcome using minimal resources (time, electricity, etc.) |

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5. Draw the flowchart symbols.

| start/end | process | subprocess | decision | input/output |
|-----------|---------|------------|----------|--------------|
|           |         |            |          |              |

6. What is the difference between a function and a procedure?

.....

.....

7. Given the method header: “`public static boolean isTeenager( int age )`”, fill each table cell with the most specific vocabulary word that describes each given part of the method header.

|                            |                      |                         |                      |
|----------------------------|----------------------|-------------------------|----------------------|
| <code>public static</code> | <code>boolean</code> | <code>isTeenager</code> | <code>int age</code> |
| modifiers                  |                      |                         |                      |