Unit Test

Name:_____Class and Section: M2/_____ ClassNo._____Date:_____

I. Answer the following questions.

1. What is computational thinking?

2. What is the difference between programming and computational thinking?

3. What are the four elements of computational thinking?

II. Put a check (/) on the box that corresponds to your answer.

1. What does computational thinking involve?

a. Thinking like a computer

b. Breaking a complex problem down into simple steps

c. Learning how to program

2. What is a complex problem?

a. A problem that can only be solved by using a computer

b. A problem that does not have an obvious, immediate solution

c. A problem that requires more than one computer to solve

3. What is the difference between programming and computational thinking?

a. Computational thinking tells a computer what to do. Programming allows us to work out what to tell the computer to do.

b. Programming tells a computer what to do. Computational thinking allows us to work out what to tell the computer to do.

c. Programming tells a computer what to do. Computational thinking allows us to write in a programming language.

4. What is abstraction?

a. The process of breaking down a complex problem into a series of more manageable problems.

b. The creation of an algorithm to solve a problem

c. The process of filtering out the characteristics of problems that are not needed in order to concentrate on those that are needed

5. Which of the following is an example of thinking computationally?

a. Asking a friend how to bake a cake

b. Trying different ingredients to see which works best when making a cake

c. Planning how to bake a cake and compiling a list of steps to follow

6. What is the name given to the process of breaking down a problem into smaller problems?

a. Decomposition

b. Abstraction

c. Algorithm design

7. What is a transport map a good example of?

a. Decomposition

b. Abstraction

c. Algorithm design

8. Working out how to complete a video game is an example of what?

a. Decomposition

b. Abstraction

c. Algorithm design

9. Deciding what matters and what does not is an example of what?

a. Decomposition

b. Abstraction

c. Algorithm design

10. Deciding which clothes to wear to a party is an example of what?

a. Abstraction

b. Computational thinking

c. Decomposition

II. Explain each concept of Computational Thinking and give an example on how you apply these concepts in everyday life.

1. Decomposition -

2. Abstraction -

3. Pattern Recognition -

4. Algorithm -