AP Computer Science Name_____ Per _____
Chapter 5 Review WS

1) Write the definition and give an example of syntax (if applicable) for the following vocabulary words and concepts:

   class

   object

   constructor

   method

   parameters (know how primitive types and objects are passed)

   static variable

   static method

   `null` reference

   == vs `equals()`

   interface

   `Comparable` interface

   `compareTo()`

   `toString()`

   exceptions (`ArithmeticException, IllegalArgumentException, NullPointerException`)

   polymorphism

   encapsulation

   inheritance

   abstraction

2) Suppose we want to create a class to hold test information about a student. A student has these attributes:

   The student name.
   An identification number that is unique to each student. The identification numbers are positive integers starting at 1000 and assigned in increasing numerical order as the `Student` objects are created.
   Three test scores.

When a new `Student` object is created, it must be assigned an identification number that will be the next consecutive identification number available. The new student is created with a student name and three test scores. The only operations valid for a `Student` object are:

Retrieve the identification number for the student.
Retrieve the student's name.
Compute and return the average test score.
A `toString` method which returns a formatted string representing the object (`name, id, test1, test2, test3` and `average`).

Write the `Student` class on a separate piece of paper. Remember to:

Choose appropriate variable and method names.
Use Javadoc comments including `@param` and `@return`.
Be consistent with information-hiding principles.