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TO PASS: 80% or higher

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GRADE
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Module 6 quiz on Object Oriented Programing concepts

LATEST SUBMISSION GRADE
100%

1. 1 / 1 point

An object is

- ☒ The grouping together of data and behavior to create a single entity
- ☐ The blue print for creating classes
- ☐ A way to hide implementation details from the user
- ☐ A sequence of characters

✓ Correct

2. 1 / 1 point

A typical object oriented program

- ☐ uses methods and primitive data types to perform most of its useful behavior.
- ☒ uses objects to perform most of its useful behavior.
- ☐ uses objects to model the behavior of the ints, chars and boolean variables used in the program.
- ☐ must consist of at least four classes.

✓ Correct

3. 1 / 1 point

An example of abstraction would be

- ☐ only selling digital cameras to experienced users.
- ☒ supplying a Quick Start guide with a digital camera.
- ☐ supplying batteries with a digital camera.
- ☐ supplying the technical drawings with a digital camera.

✓ Correct

4. 1 / 1 point

An example of an instance of the City class would be

- ☒ the city of Philadelphia.
- ☐ the variables Name, Latitude, Longitude, Country and Population.
- ☐ the methods to update the city's population and to calculate the distance to other cities.
- ☐ the plans for a city.

✓ Correct

5. A class file is (select all that apply) 1 / 1 point

- ☒ a file containing a single program or module.

✓ Correct

You have already written several class files of this type in previous modules of this MOOC.

- ☒ a template or blueprint for an object.

✓ Correct

This is the definition of a class file in the context of Object Oriented Programming.

- ☐ a collection of objects.
- ☐ a collection of keywords.

6. A String object is (select all that apply)

1 / 1 point

☒ similar to primitive data types in some respects.

✓ Correct

There are many similarities between Strings and primitive data types, not only because all objects have some things in common with primitive data types but also because String objects have a few shortcuts, like how they are declared. One reason is because variables of String type are used so often, the Java language included a few conveniences.

☒ a reference to a memory location where data is stored.

✓ Correct

Because a String is an object, the state is not stored in the variable itself, but is stored elsewhere in memory. One way to remember this concept is to visualize a stack in memory where variables are stored. All variables are expected to be a given size. Strings are of varying sizes and so, are stored elsewhere.

☒ a sequence of characters.

✓ Correct

This describes the structure or state of a String.

☐ a primitive data type.

7. Select all of the Java statements that would compile (would not cause an error).

1 / 1 point

☐

```
1 String str1 = "Good programming";
2 out.println(str1.concat(10.0));
```

☒

```
1 out.println("Hello" + " programmers!");
```

✓ Correct

☒

```
1 String str1 = "Hi";
2 String str2 = "Hi";
3 out.println(str1 == str2);
```

✓ Correct

Although comparing two Strings with the "==" operator is not ideal (in most cases we really want to determine if the two Strings have the same sequence of characters), it is syntactically permissible and will not cause a compile error. Beware!

☐

```
1 out.println("Hello kate" - "kate");
```

☒

```
1 String str1 = "Hi";
2 String str2 = "Hi";
3 out.println(str1.equals(str2));
```

✓ Correct

8. Given the following objects

1 / 1 point

```
1 String str1 = "herald";
2 String str2;
```

How could you create the string **herald**?

☐

```
1 str1 = str1.substring(0,2) + "ra";
2 str1 = str1 + str1.substring(2,4);
```

☐

```
1 str2 = str1 + "ra";
```

☐

```
1 str1.substring(0,2);
2 str2 = "ra";
3 str2.concat(str1.substring(2,4));
```

☒

```
1 str2 = str1.substring(0,2);
2 str2 = str2 + "ra";
3 str2 = str2.concat(str1.substring(2,4));
```

✓ Correct

Here we insert "ra" into the middle of the string in three steps.