**Java Objects Fill-in-the-blank #1: Donuts and Cars** name: _____

Complete each sentence with an appropriate word choice using the key box below. Check your work against the key. There may be situations where several terms could work in a sentence. Discuss these alternatives with your peers and check against the Liang9 as needed.

*words may be used once, more than once, or zero times--so don't cross them out!*

| | | |
|---|---|---|
| sylvia | baked goods | vehicle |
| class | object | type |
| blueprint | concept | construct/ing |
| instance | new | instantiating |
| Donut | Car | member variable(s) |
| DonutLand | CarLand | method |
| local variable | int | String |
| boolean | double | Object |
| java virtual machine (JVM) | client | static |
| reference variable | dot operator | |

## Part A: Instantiation

In Java, the keyword _____ instructs the _____ to create an _____ of the specified _____ in memory. Each new _____ we construct is made with its own set of the member variables and method specified on the blueprint class. In our Donut example, each _____ of our _____ class had two _____: String name and int `percentRemaining`.

## Part B: Blueprint and client classes

Our java programs now involve two or more classes of our own design: one we call the _____ class because it acts as an instruction sheet for _____ objects of that _____ . Blueprint classes will

NOT contain the program's _____, and therefore cannot stand alone as a working Java program.

It needs a partner class! The second kind of class in our object-oriented programs acts as the _____ of our blueprint _____. Just like the client of a business uses that business's services to solve a problem or carry out a task, our client class uses the _____ and _____ of our blueprint class to carry out a programming endeavor, such as simulating a _____factory or a _____ repair shop.

Unlike our blueprint classes, our _____ class contains the program's _____. In this method, we _____ objects using a reference to our blueprint class and the _____ keyword.

Once we create the object, we store its location in a special variable called a _____reference variable_____, also called a pointer variable.

We can then use the magical (small but mighty) _____ to access _____ and _____ located on our newly created objects

**Part C: Static vs. Instance**

When we create a blueprint class that we intend on _____, we do not use the modifier _____ when declaring member variables and methods. In other words, the _____ modifier could be interpreted to mean "we won't be creating an object out of this class".