1. Real-world objects contain ___ and ___.
   a. Fields, Methods
   b. Instances, Classes
   c. Strings, Ints
   d. State, Behavior
2. A software object's state is stored in ___.
   a. The class
   b. Fields
   c. The constructor
   d. Methods
3. A software object's behavior is exposed through ___.
   a. Functions
   b. Methods
   c. Classes
   d. Variables
4. Hiding internal data from the outside world, and accessing it only through publicly exposed methods is known as data ___.
   a. Encapsulation [This term is not on your exam but it is an important concept to know, we hide internal data using the keyword private.]
5. A blueprint for a software object is called a ___.
   a. Class
   b. Object
   c. Interface
   d. Abstract Class
6. Common behavior can be defined in a ___ and inherited into a ___ using the ___ keyword.
   a. Superclass, Subclass, extends
   b. Superclass, Subclass, Implements
   c. Subclass, Superclass, extends
   d. Subclass, Superclass, Implements
7. A collection of methods with no implementation is called an ___.
   a. Class
   b. Interface
   c. Object
   d. Abstract Class
8. A namespace that organizes classes and interfaces by functionality is called a ___.
   a. Package [Not on your exam, important to know.]
9. The term API stands for ___?
   a. Application Programming Interface [Not on your exam, important to know.]
10. The term "instance variable" is another name for ___.
    a. Static field
    b. Non-Static field
11. The term "class variable" is another name for ___.
    a. Static Field
    b. Non-Static Field

12. A local variable stores temporary state; it is declared inside a ___.
    a. Method
    b. Constructor
    c. Class
    d. Object
13. A variable declared within the opening and closing parenthesis of a method signature is called a ____.
    a. Instance variable
    b. String
    c. Object
    d. Parameter
14. What are the eight primitive data types supported by the Java programming language?




15. Character strings are represented by the class ___.
    a. Java.lang.Object
    b. Java.lang.util
    c. Java.lang.String
    d. Java.lang.Character
16. An ___ is a container object that holds a fixed number of values of a single type.
    a. List
    b. Array
    c. Variable
    d. Feild
17. To invert the value of a Boolean, which operator would you use?
    a. !
    b. |
    c. ?
    d. %
18. Which operator is used to compare two values?
    a. =
    b. ==
19. Explain the function of the following operators:
    a. &&
    b. ||
20. The most basic control flow statement supported by the Java programming language is the ___ statement.
    a. If else
    b. do while
    c. is
    d. in
21. The ___ statement allows for any number of possible execution paths.
    a. do-while
    b. for
    c. foreach
    d. switch

22. The ___ statement is similar to the while statement, but evaluates its expression at the ___ of the loop.
    a. do-while, bottom [this is not part of your exam, but I recommend trying out the do-while loop in you own time]
23. How do you write an infinite loop using the for statement?

24. How do you write an infinite loop using the while statement?

25. Consider the following class:

```java
public class IdentifyMyParts {
    public static int x = 7;
    public int y = 3;
}
```

      a. What are the class variables?
      b. What are the instance variables?
      c. What is the output from the following code:

```java
IdentifyMyParts a = new IdentifyMyParts();

IdentifyMyParts b = new IdentifyMyParts();

a.y = 5;

b.y = 6;

a.x = 1;

b.x = 2;

System.out.println("a.y = " + a.y);

System.out.println("b.y = " + b.y);

System.out.println("a.x = " + a.x);

System.out.println("b.x = " + b.x);

System.out.println("IdentifyMyParts.x = " + IdentifyMyParts.x);
```

26. What is wrong with the following interface?

```java
public interface SomethingIsWrong {

  void aMethod(int aValue){

    System.out.println("Hi Mom");

  }

}
```

27. Fix the interface in question 26

28. Is the following interface valid?

```java
public interface Marker {

}
```