

1. In the statement `class car : public vehicle`, which is the base class?
  - a. Car
  - b. vehicle
  - c. public
  - d. class
2. \_\_\_\_\_ allows us to create new classes based on existing classes.
  - a. Polymorphism
  - b. Inheritance
  - c. Function overloading
  - d. The copy constructor
3. When you derive a class from an existing class, you \_\_\_\_\_ add new data and functions.
  - a. may never
  - b. may sometimes
  - c. may
  - d. None of these
4. \_\_\_\_\_ members of a base class are never accessible to a derived class.
  - a. Public
  - b. Private
  - c. Protected
  - d. a, b, and c
  - e. None of these
5. The \_\_\_\_\_ constructor is called before the \_\_\_\_\_ constructor.
  - a. base, derived
  - b. derived, base
  - c. public, private
  - d. private, public
6. A \_\_\_\_\_ of a base class expects to be overridden in a derived class.
  - a. constructor function
  - b. destructor function
  - c. static function
  - d. virtual function
7. The term \_\_\_\_\_ means the ability to take many forms.
  - a. inheritance
  - b. polymorphism
  - c. member function
  - d. encapsulation
8. \_\_\_\_\_ to a base class may be assigned the address of a derived class object.
  - a. Access specifiers
  - b. Static members
  - c. Private members
  - d. Pointers
9. The base class access specification determines how \_\_\_\_\_ members in the base class may be accessed by derived classes.
  - a. Public
  - b. Private
  - c. Protected
  - d. a, b, and c
  - e. None of these
10. When a derived class has two or more base classes, the situation is known as \_\_\_\_\_.
  - a. multiple inheritance
  - b. polymorphism
  - c. encapsulation
  - d. access specification
11. Arguments are passed to the base class destructor function by the \_\_\_\_\_ class \_\_\_\_\_ function.
  - a. derived, constructor
  - b. derived, destructor
  - c. base, constructor
  - d. base, destructor
  - e. None of these
12. In an inheritance situation, the new class that you create from an existing class is known as the \_\_\_\_\_.
  - a. derived class
  - b. inheritee
  - c. child class
  - d. a and c
  - e. None of these
13. The base class's \_\_\_\_\_ affects the way its members are inherited by the derived class.
  - a. name
  - b. return data type
  - c. access specification
  - d. All of these
14. Protected members of a base class are like \_\_\_\_\_, but they may be accessed by derived classes.
  - a. constructor functions
  - b. static members
  - c. private members
  - d. public members

15. The following statement: `class Car : private Vehicle`  
allows the \_\_\_\_\_ members of the Car class to access \_\_\_\_\_ members of the Vehicle class.
- a. private, private                      b. public, private                      c. protected, private  
d. public, protected                      e. None of these
16. The \_\_\_\_\_ destructor is called before the \_\_\_\_\_ destructor.
- a. base, derived                      b. derived, base                      c. public, private                      d. private, public
17. \_\_\_\_\_ is commonly used to extend a class, or to give it additional capabilities.
- a. Inheritance                      b. Privacy                      c. The constructor                      d. The destructor
18. When member functions behave differently, depending upon which object performed the call, this is an example of \_\_\_\_\_.
- a. chaos theory                      b. virtual insubordination                      c. polymorphism                      d. encapsulation
19. A virtual function is a member function that expects to be \_\_\_\_\_ in a derived class.
- a. ignored                      b. called frequently                      c. overridden                      d. private                      e. None of these
20. A virtual function is declared by placing the keyword \_\_\_\_\_ in front of the return type in the base class's function declaration.
- a. virtual                      b. private                      c. public                      d. protected                      e. None of these
21. In the following statement: `class Car : protected Vehicle`  
which is the derived class?
- a. Car                      b. Vehicle                      c. protected                      d. cannot be determined                      e. None of these
22. In the following statement: `class car : protected vehicle`  
what is being protected?
- a. derived class functions                      b. base class members  
c. derived class data                      d. future inherited classes
23. Polymorphism is when \_\_\_\_\_ in a class hierarchy perform differently, depending upon which object performs the call.
- a. base class constructors                      b. member functions  
c. derived class destructors                      d. derived class constructors
24. \_\_\_\_\_ functions are dynamically bound by the compiler.
- a. Constructor                      b. Destructor                      c. Static                      d. Virtual                      e. None of these
25. In an inheritance situation, you may not pass arguments to a base class constructor.
- a. True                      b. False
26. More than one class may be derived from a base class.
- a. True                      b. False

27. **A derived class may become a base class, if another class is derived from it.**
- a. True      b. False
28. **The base class access specification can be viewed as a filter that base class members must pass through when becoming inherited members of a derived class.**
- a. True      b. False
29. **When arguments must be passed to the base class constructor, they are passed from the derived class constructor's header line.**
- a. True      b. False
30. **A member function of a derived class may not have the same name as a member function of a base class.**
- a. True      b. False
31. **Static binding occurs when the compiler binds a function call with the function call that resides in the same class as the call itself.**
- a. True      b. False
32. **Pointers to a base class may be assigned the address of a derived class object.**
- a. True      b. False
33. **A derived class may not have any classes derived from it.**
- a. True      b. False