

3. Class Creation

Starter Quiz · 课前小测

AP Computer Science A

Name: _____ Score: _____

1. Abstraction is best described as...
 - ☐ hiding details to focus on the main idea
 - ☐ writing more code
 - ☐ deleting comments
 - ☐ a run-time error
2. A modular design (independent, well-named pieces) is mainly easier to...
 - ☐ test, maintain, and reuse
 - ☐ compile only once
 - ☐ run without a computer
 - ☐ hide from users
3. Which are the three kinds of members in a class?
 - ☐ instance variables, constructors, methods
 - ☐ loops, ifs, casts
 - ☐ int, double, boolean
 - ☐ public, private, static
4. A constructor has...
 - ☐ the class's name and no return type
 - ☐ a void return type
 - ☐ any name you like
 - ☐ an int return type
5. A method that returns information without changing the object is a(n)...
 - ☐ accessor (getter)
 - ☐ mutator (setter)
 - ☐ constructor
 - ☐ cast
6. Most code is read and changed far more often than it is first written.
 - ☐ True ☐ False

7. A method can change the caller's int variable by modifying its parameter.
 - ☐ True ☐ False

8. Breaking a big problem into smaller named behaviors (methods) is called method ____ (one word).

9. Bias in a program's data or logic can produce unfair results at scale.
 - ☐ True ☐ False

10. Keeping data private and exposing it only through methods is called ____ (one word).

AP Computer Science A

1. **hiding details to focus on the main idea**

Abstraction hides how something works so you can use what it does.

2. **test, maintain, and reuse**

Modularity makes changes safer and pieces reusable.

3. **instance variables, constructors, methods**

State (instance variables), setup (constructors), behavior (methods).

4. **the class's name and no return type**

Same name as the class, no return type — not even void.

5. **accessor (getter)**

Accessors read and return; mutators change state.

6. **True**

So maintainable design pays off repeatedly.

7. **False**

Primitives are copied — the caller's int is untouched.

8. **decomposition**

Method decomposition splits work into focused methods.

9. **True**

Design choices affect real people — consider who is impacted.

10. **encapsulation**

Encapsulation protects an object's data.