

AP[®] Computer Science: Unit 08 Checklist

Getting Started with Objects

- ☐ I created the three Unit 08 subfolders: Documents, Lessons, and Assessments.
- ☐ I printed the Unit 08 Checklist.
- ☐ I completed the Gas Mileage Record Sheet.
- ☐ I completed the Home Electricity Bill Record Sheet.

Real World Objects

- ☐ I understand the significance of the Java Virtual Machine.
- ☐ I can explain the difference between classes and objects.
- ☐ I can identify the attributes and behaviors of objects.

Instances of a Class

- ☐ I understand the concept of top-down design.
- ☐ I understand the concept of procedural abstraction.
- ☐ I can write method declarations.

Default Constructors

- ☐ I can write programs with default constructors.
- ☐ I can instantiate objects with default constructors.
- ☐ I know how to create and interpret a Class diagram.
- ☐ I distinguish between procedural and object-oriented programming.

Discussion Topic

- ☐ I have a general understanding of how computer models are created and used.
- ☐ I participated in the online discussion.
- ☐ I registered to participate in the climateprediction.net project.

Constructors with Parameters

- ☐ I can write programs with constructors that take parameters.
- ☐ I can instantiate objects and initialize private instance variables.

Overloading Methods and Using Two Classes

- ☐ I can write overloaded methods.
- ☐ I can design and write programs that use two classes.

Constructing Multiple Objects

- ☐ I can instantiate multiple objects of a class.

Arrays of Objects

- ☐ I can write programs that store objects in an array data structure.

Javadocs

- ☐ I can document a class with the javadocs utility.

ArrayLists I

- ☐ I can explain the difference between an array and an **ArrayList** data structure.
- ☐ I can write programs with simple numeric or String **ArrayLists**.

ArrayLists II

- ☐ I can write programs with **ArrayLists** that instantiate multiple objects.

Challenge Program

- ☐ I can write an object-oriented program.
- ☐ I can explain the importance of computer models.

Checkpoint

- ☐ I can write a program that models a simple real-life situation.

Exam

- ☐ I have reviewed for my Unit 08 Exam.