Unit 02: Objects and Primitive Data

Content Area: **Mathematics**
Course(s): **AP Comp Sci A**
Time Period: **Semester 1**
Length: **3 weeks**
Status: **Published**

Standards

MA.K-12.1	Make sense of problems and persevere in solving them.
MA.K-12.7	Look for and make use of structure.
TECH.K-12.1.4.c	develop, test and refine prototypes as part of a cyclical design process.
TECH.K-12.1.5.a	formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.

Enduring Understanding

Variables are used to store and access both primitive data and objects in order to perform different tasks in a computer program.

An object represents an instance of a class, while a class is a blueprint which define the variables and methods for an object.

Essential Questions

What are objects and primitive data?

How do you create and use objects?

Knowledge and Skills

- describe examples of primitive data
- explain the difference between objects and primitive data.
- use both println and print methods.
- explain the relationship between a class and an object of that class.
- create objects and use them.
- use objects of the Scanner class to get user input.
- uses a package to group related classes under a common name.

Transfer Goals

Students will be able to explain how various types of data are stored and accessed by computer programs.

Some data and structures can contain self similar data, such as composition functions in math class.

Resources

AP CS A Java Course — AP CSAwesome

Overview (Java SE 11 & JDK 11)

Albert.io

AP Classroom

Repl.it IDE