

# Unit 06: Arrays

Content Area: **Mathematics**  
Course(s): **AP Comp Sci A**  
Time Period: **Semester 2**  
Length: **5 weeks**  
Status: **Published**

## Standards

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MA.K-12.4	Model with mathematics.
MA.K-12.5	Use appropriate tools strategically.
MA.K-12.6	Attend to precision.
TECH.K-12.1.3.c	curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

## Enduring Understanding

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An array is an object that stores a collection of data of one type.

In computer science, arrays commonly store thousands of records and programmers must understand how to create arrays and work with their stored data.

## Essential Questions

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How can large collections of data be organized so they are easy to access or modify?

What are the benefits and hinderances of data being zero-referenced.

## Knowledge and Skills

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- Define and Use Arrays
- Describe how arrays and array elements are passed as parameters
- Explore how arrays and other objects can be combined to manage complex information
- Explore searching and sorting with arrays
- Learn to use multidimensional arrays
- Examine the ArrayList class

## Transfer Goals

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Students will be able to work with large collections of data.

Excel can recreate many of the mechanisms of array manipulation.

## **Resources**

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[AP CS A Java Course — AP CSAwesome](#)

[Overview \(Java SE 11 & JDK 11\)](#)

[Albert.io](#)

[AP Classroom](#)

[Repl.it IDE](#)