Unit 6: Arrays

Content Area: **Business**
Course(s): **Generic Course**
Time Period: **Semester 1 & 2**
Length: **1 weeks**
Status: **Published**

Standards

TECH.8.2.12.A.CS2	The core concepts of technology.
TECH.8.2.12.D.6	Synthesize data, analyze trends and draw conclusions regarding the effect of a technology on the individual, society, or the environment and publish conclusions.
TECH.8.2.12.E.2	Analyze the relationships between internal and external computer components.
TECH.8.2.12.E.3	Use a programming language to solve problems or accomplish a task (e.g., robotic functions, website designs, applications, and games).
TECH.8.2.12.E.CS1	Computational thinking and computer programming as tools used in design and engineering.

Enduring Understanding

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

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

What is the difference between position and value?

Why are arrays categorized as Objects?

Knowledge and Skills

- 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

Transfer Goals

Grouping data makes it easier to share and analyze.

Deconstructing a problem into components allows you to tackle complicated tasks.

Resources

CS Awesome curriculum and online textbook with interactive activities

Repl.it Teams for Education for writing programs

Teacher created Computer Science Google site