

Vidcode Creative Coding

6th-8th Grade Standards Map

Arizona Computer Science Standards



CURRICULAR GOALS

- Learn JavaScript and programmer culture
- Identify as a programmer
- Use code to enhance and personalize visual media

MATERIALS REQUIRED

- One computer per 1-2 students
- Headphones (optional)
- Vidcode accounts
- Stable internet connection
- Chrome or Safari

Creative Coding Unit	Concept: Data and Analysis (DA)		
Unit 7 Word Wizardry	6.DA.CVT.1 Compare different computational tools used to collect, analyze and present data that is meaningful and useful.	7.DA.CVT.1 Collect and analyze data using computational tools to create models that are meaningful and useful.	8.DA.CVT.1 Collect data using computational tools and transform the data to make it more meaningful and useful.
Unit 3 Loops and Animations	6.DA.S.1 Identify multiple encoding schemes used to represent data, including binary and ASCII.	7.DA.S.1 Use multiple encoding schemes to represent data, including binary and ASCII.	8.DA.S.1 Represent data using multiple encoding schemes including binary and ASCII.
	Concept: Algorithms and Programming (AP)		
Unit 4 Conditional Logic and Special Effects	6.AP.A.1 Identify planning strategies such as flowcharts or pseudocode, to simulate algorithms that solve problems.	7.AP.A.1 Use planning strategies, such as flowcharts or pseudocode, to develop algorithms to address complex problems.	8.AP.A.1 Develop planning strategies, such as flowcharts or pseudocode, to develop algorithms to address complex problems.
Unit 1 Intro to JavaScript	6.AP.V.1 Identify variables that represent different data types and perform operations on their values.	7.AP.V.1 Compare and contrast variables that represent different data types and perform operations on their values.	8.AP.V.1 Create named variables that represent different data types and perform operations on their values.
Unit 6 Algorithms and Art	6.AP.C.1 Design programs that combine control structures, including nested loops and compound conditionals.	7.AP.C.1 Design and develop programs that combine control structures, including nested loops and compound conditionals.	8.AP.C.1 Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.

Unit 4 Conditional Logic and Special Effects	6.AP.M.1 Decompose problems into parts to facilitate the design, implementation, and review of programs.	7.AP.M.1 Decompose problems into parts to facilitate the design, implementation, and review of programs.	8.AP.M.1 Decompose problems into parts to facilitate the design, implementation, and review of programs.
Unit 8 Choose Your Own Codeventure	6.AP.M.2 Use procedures to organize code and make it easier to reuse.	7.AP.M.2 Use procedures with parameters to organize code and make it easier to reuse.	8.AP.M.2 Create procedures with parameters to organize code and make it easier to reuse.
Unit 2 Arrays	6.AP.PD.2 Incorporate existing code into programs and give attribution.	7.AP.PD.2 Incorporate existing code and media into programs, and give attribution.	8.AP.PD.2 Incorporate existing code, media, and libraries into original programs, and give attribution.
Unit 7 Word Wizardry	6.AP.PD.3 Test programs using a range of inputs and identify expected outputs.	7.AP.PD.3 Systematically test and refine programs using a range of possible inputs.	8.AP.PD.3 Systematically test and refine programs using a range of possible inputs.
Unit 4 Conditional Logic and Special Effects	6.AP.PD.5 Document programs in order to make them easier to follow, test, and debug.	7.AP.PD.5 Document programs to make them easier to follow, test, and debug.	8.AP.PD.5 Document programs to make them easier to follow, test, and debug.