

Unit 10B: CODE- Happy Maps

Content Area: **Unified Arts**
Course(s): **Computer Science 1, Computer Science K**
Time Period: **November**
Length: **5 Days**
Status: **Published**

Unit Summary

At the root of all computer science is something called an algorithm. The word "algorithm" may sound like something complicated, but really it's just a list of instructions that someone can follow to achieve a result. To provide a solid base for the rest of your students' computer science education, we're going to focus on building a secure relationship with algorithms.

Standards

CRP.K-12.CRP11	Use technology to enhance productivity.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.C.CS4	Contribute to project teams to produce original works or solve problems.
TECH.8.2.2.E.3	Create algorithms (a sets of instructions) using a pre-defined set of commands (e.g., to move a student or a character through a maze).
TECH.8.2.2.E.4	Debug an algorithm (i.e., correct an error).
TECH.8.2.2.E.5	Use appropriate terms in conversation (e.g., basic vocabulary words: input, output, the operating system, debug, and algorithm).

Student Learning Objectives

Students will learn to...

- list steps to move character around a map.
- arrange directions to reach predetermined goal.
- predict where character will land, given a list of steps.

Essential Questions

- What is an algorithm?
- How do I use an algorithm to complete a task?

Enduring Understandings

Students will understand that...

- an algorithm is a list of instructions.
- algorithms are a very important part of computer science.