

Unit 10A: HOUR of CODE

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

Unit Summary

Students will be exposed to basic programming and the concept of an algorithm. 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.

Student Learning Objectives

Students will learn to...

- list steps to move a character around a maze.
- arrange directions to reach a pre-determined goal.
- predict where a character will land, give a list of steps.

Essential Questions

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

Enduring Understandings

Students will understand that...

- an algorithm is a list of steps to accomplish a task.

Application

Students will be able to independently use their learning to...

- arrange directions to reach a pre-determined goal.
- use an algorithm to program.

Skills

Students will be skilled at...

- creating and using an algorithm to program.
- debug an algorithm.

Resources

- Hour of Code curriculum- Lesson 1- Happy Maps
- iPad- Box Island app
- abcya.com- Lightbot