

Unit 5 Technology-Computer Science

Content Area: **Technology**
Course(s): **Technology K**
Time Period: **Marking Period 4**
Length: **May/June**
Status: **Published**

Essential Question

How can we use computer programming to complete a task?

Big Ideas

Computers follow precise sequences of steps that automate tasks.

Enduring Understandings

8.1.2.AP.1: Model daily processes by creating and following algorithms to complete tasks

8.1.2.AP.4: Break down a task into a sequence of steps.

8.1.2.AP.5: Describe a program's sequence of events, goals, and expected outcomes.

8.1.2.AP.6: Debug errors in an algorithm or program that includes sequences and simple loops

8.2.2.ED.1: Communicate the function of a product or device.

8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.

8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design process.

Activities and Assessments

- Computational Thinking: Patterns
- Spirit Day T-Shirts

- Introduction to Coding
- What is Block Coding
- Coding with KIBO Robots- Make a Maze

Resources:

Learning.com

Code Monkey Jr.

Kodable

KIBO Robots

Climate Change

8.2.2.ED.1: Communicate the function of a product or device.

8.2.2.ED.2: Collaborate to solve a simple problem, or to illustrate how to build a product using the design process.

8.2.2.ED.3: Select and use appropriate tools and materials to build a product using the design process.

- Activity: In this unit, students will participate in a coding activity using the KIBO robots to make a maze