

MP4-Computer Science

Content Area: **Technology**
Course(s): **Technology 1**
Time Period: **Marking Period 4**
Length: **January/February/March**
Status: **Published**

Essential Questions

How can I use computer programming to complete a task?

Big Ideas

Computers follow precise sequences of steps that automate tasks. Complex tasks can be broken down into simpler instructions, some of which can be broken down even further.

Enduring Understandings

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

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

8.1.2.AP.3: Create programs with sequences and simple loops to accomplish 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

8.2.2.NT.1: Model and explain how a product works after taking it apart, identifying the relationship of each part, and putting it back together.

8.2.2.NT.2: Brainstorm how to build a product, improve a designed product, fix a product that has stopped working, or solve a simple problem.

Activities and Assessments

- KIBO Robots-Class Pet

- Computational thinking: Patterns
- Computational thinking: directions
- A New Student in Class
- Coding with Code Monkey Jr.
- Finding information
- Databases: Classifying Data

Resources:

Learning.com

Code Monkey

KIBO Robots