# **Unit 5 Technology-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