

2nd Grade Curriculum Roadmap

Children learn about what a robot is (and is not), explore human languages and programming languages, learn about algorithms, and begin to explore KIBO and its programming blocks.

Lessons 1-4

Children decorate their KIBO projects, explore debugging, learn about the Lightbulb and Light Block, and explore the Wait for Clap Block and Sound Sensor.

Re-Read *Classified* in Lesson 9.

Lessons 9-12

Children learn about nested loops and statements and finish their "Silly Rules Race" program. Children also begin to work on their final project, a KIBO play of *The Three Little Pigs*.

Read Aloud *The Three Little Pigs* in Lesson 19.

Lessons 17-20

Lessons 5-8

Children learn about the Design Process, write their first programs, and explore the Beep and Sing Blocks.

Read Aloud *Classified: The Secret Career of Mary Golda Ross, Cherokee Aerospace Engineer* in Lesson 6.

Lessons 13-16

Children are introduced to the Light Sensor, Distance Sensor, repeat loops, and conditionals. Children also program KIBO to be part of a "Silly Rules Race."

Lessons 21-24

Children complete their final *Three Little Pigs* projects. As they share in a final showcase, they discuss collaborations and contributions.

Key Activity - Lesson 9: Decorating Our Spacecrafts

Based on the book *Classified*, children program a secret space mission using KIBO.

Key Activity - Lesson 15: Silly Rules Race!

Children program KIBO to be part of a "Silly Rules Race."

Key Activity - Lesson 22: Your Final Project III

Children complete their KIBO plays of *The Three Little Pigs*.