

**Lesson 12:
What's That Sound?**

Lesson 12 Overview: In Lesson 12, children will learn about the Sound Sensor, Sound Recorder, and Wait for Clap Block and write a program using this block and the two modules.

Powerful Ideas from Computer Science: Control Structures, Hardware/Software, Representation, Debugging

Powerful Ideas from Literacy: Literary Devices

I. Warm Up: What Do We Hear?

- Play sounds from the Listening Game slidedeck and have children guess the sounds!
- Engage children in a conversation around which sounds were harder or easier to guess than others.

II. Opening Tech Circle: Human Senses and Robot Sensors

- Explain to children that just like humans have different senses to take in information about the world around us, robots have sensors to do the same.

III. KIBO Time: Sound Sensor and Wait for Clap, Sound Recorder, & Free Play

- Show children the Wait for Clap Block, and the Sound Sensor. Create an example program together. Run the program and have children discuss what the robot is doing.
- Then, show children the KIBO Sound Recorder module. Demonstrate with a model program how they can make three different recordings by pressing and holding down on the three shape buttons on the module: the circle, square, and triangle.
- In groups, children will explore the Sound Sensor and Recorder. Additionally, children should understand that when KIBO reads the Wait for Clap, it knows to only keep going when it hears a noise. Children should also understand the similarities and differences between the Sound Sensor and humans' ears.

IV. Closing Tech Circle: Roses & Buds

- Each child shares one "rose" (thing that they learned) and one "bud" (thing they want to know more about and are excited about learning).

Vocabulary:

Senses

Sensor

Record

Input

Output

KIBO Blocks:

Wait for Clap Block

KIBO Modules:

Sound Sensor

Sound Recorder