

## **Sound Box (Cicadas)**

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### **Materials**

Wooden box with four buttons. Three are below photos of three species of brood 10 cicadas, the fourth is a stand-alone button below the others. The box is attached to headphones. When the buttons are depressed, the songs of the three species of cicadas play. The fourth button plays the songs at random and must be matched.

Headphones

Small speaker with aux cord.

### **Aims**

#### **Direct**

Refine the auditory sense

#### **Indirect**

Expose child to the concept of species.

Help child distinguish insect sounds.

### **Presentation 1**

- 1) Place tape over the fourth button out of presence of child.
- 2) Attach the sound box to a small speaker
- 3) Invite child to the work (this may be best as a group lesson).
- 4) Show the child the work and draw their attention to the three photos and ask what differences they see.
- 5) Explain that they are three species – three kinds – of cicadas. And tell them each species makes their own sounds.
- 6) Explain the buttons play their songs.
- 7) Press each button and listen to the songs.
- 8) Replace the speaker with headphones and tell the child that the work stays at the station but they may listen to the songs whenever they want.
- 9) If they ask about the tape explain that you will discuss that tomorrow.

### **Presentation 2**

- 1) Invite children to the lesson.
- 2) Unpeel the tape from the work uncovering the fourth button.
- 3) Explain that the fourth button plays the three sounds at random and you have to match the sounds.
- 4) Say we are going to listen to the songs again and press the three song buttons.
- 5) Press the fourth button.
- 6) Press the species button that you think matches.
- 7) Repeat another time.

### **Control of Error**

Hearing that the sounds match or don't match.

**Points of Interest**

Headphones, buttons, pictures.

Interesting sounds.

**Variations/Extensions**

Invite the child to listen to the three sounds and then do another work and come back and try to match immediately.

The component inside the box (Adafruit FX sound board) can be reprogrammed with any three sounds – bird songs, whale songs, letter sounds, etc.

**Language**

Species

**Age: 3-6**

