

## **Grade Level: 6**

**Title:** Exploring Pitch, Timbre, and Melody with the Chrome Lab Oscillator

### **Activity Description:**

In this activity, students will experiment with different oscillators using the Chrome Lab Oscillators. Through this, they will learn how to differentiate between different timbres and observe how changing the frequency of a sound changes its pitch. Ultimately, they will collaborate with a group of peers to create and perform a melody.

**Learning Objectives:** (What will the students be able to do/demonstrate after they complete this activity?)

Understand the basic concepts of pitch and timbre.

Learn how to create and perform a melody.

Experience collaborative writing and performance.

**Steps:** (How will you facilitate the activity? What will the students do? What are the steps you and/or the students will do in each of the following areas?)

Introduce topic– guide students to Chrome Music Lab/Oscillators

Time for exploration– experiment with different oscillators and note the differences in sound (pitch/timbre)

Time for practice– give students specific frequency ranges to practice “playing” with different oscillators; show frequency ranges for notes, or simply give the frequency ranges for a simple melody

Peer Collaboration– create groups of 4 students and assign an oscillator to each; guide them in writing a melody to play together

Sharing– take turns sharing melodies with the class

Reflection– students write about the discoveries/challenges they encountered