Making Music

AWIM®
ACTIVITY
GUIDE

Name
# KWL of Sound

What do you already know about sound? What do you want to know? Don’t worry about the “Have Learned” column – you’ll fill that out as you go along!

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Dear Students:

We need your help! The mission of EarthToy Designs, Inc., is to develop and promote toys that are fun and exciting. EarthToy Designs is creating a new music makers kit. We want to create a kit that will allow young people to make a musical instrument. The goal of the instrument is to:

1. Create music with 3 different sounds
2. Have a way to tune or change the sound
3. Make noise that is loud enough to be heard from across a room.

Our EarthToy engineers are seeking fresh ideas from kids like you. That’s why we need your help! We need you to investigate how sounds of different things are made and how sound can be made louder. We suggest that your teams take the following steps to help us:

1. Learn how sound travels.
2. Conduct experiments to figure out how different sounds are made.
3. Design a musical instrument that meets all of our needs.

Good luck with your designs!

I. M. Green
President
Our Observations

Here is a picture of the tuning fork we used:

Describe the sound it makes when you hit it with the tuning fork mallet.

Make sure that you have a bowl that is halfway filled with water. Hit the tuning fork with the tuning fork mallet. Now hold the end of the fork in the water in the bowl. Describe what happens to the water.
There’s a Drum in My Ear?

Materials

• Bowl
• Plastic wrap
• Large rubber band
• Rice
• Tuning fork and mallet

Procedure

1. Tightly stretch the plastic wrap over the top of the bowl.
2. Secure the wrap with a large rubber band.
3. Sprinkle a small amount of rice on the top of the plastic wrap.
4. Strike the tuning fork with the mallet and touch it to the plastic wrap over the bowl.

Describe what happens to the rice. Why do you think this happens?

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Geoboard Directions

Different sounds can be made on your geoboard through using different rubber bands on the geoboard and the distance you stretch them.

1. Experiment with different sounds on your geoboard.
2. Draw the position of the rubberband that creates the highest pitch.
Geoboards
Our Instrument

We used the following materials to build our instrument:

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Here is a picture of our instrument:

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We designed our instrument this way because . . .

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