SCILLSS Classroom Science Assessment Workshop

# SCILLSS Grade 8 Student Task

**Grade:** Middle School

**NGSS Performance Expectation: MS-PS4-2.** Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.

# Task

This task is about sound waves.

1. Can you make something move by using only sound? Think about the video you just watched. Develop a model and describe this phenomenon using a bowl with plastic cling wrap as the sound detector and a radio speaker as the sound source. Be sure to label the parts of your model. Be sure your model shows:
   * what is happening at the sound source;
   * how the sound source affects the surrounding medium;
   * how the medium causes changes to the sound detector; and
   * what happens to the salt on the sound detector.
2. Based on your model, describe:

* how sound waves are transmitted through the material;
* why the salt appears to move differently during the song; and
* why the plastic wrap acts as a sound detector.

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