



Dancing Sprinkles

Overview:

This lesson will allow students to see the connection between sound and vibration.

Materials:

- Bowl
- Rubber band that fits around the bowl
- Cling wrap
- Sprinkles (or salt/sugar)

Procedure:

1. Stretch the plastic wrap over the top of the bowl and secure it with a rubber band. Be careful not to rip the plastic wrap. Place the sprinkles on top.
2. Ask students to move the sprinkles by only using sound. They cannot touch the sprinkles, the bowl, plastic wrap, or the table it is sitting on. Allow students to come up with a plan and execute the plan.
3. After a few minutes, ask if anyone was successful in moving the sprinkles. Hint to students that humming near the bowl will make the sprinkles jump.
4. After telling students to hum near the bowl, explain to them that humming near the bowl makes the plastic wrap vibrate which makes the sprinkles jump. The plastic wrap is like the eardrum: the eardrum must vibrate in order for us to hear. When you hum, the air vibrates. When you hum near the plastic wrap, the air makes the plastic wrap vibrate.



Next Generation Science Standards Used:

1-PS4-1: Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.