



Subject: Science/Physics **Key Concepts:** sound, sound waves, vibration, experiments, comparisons

See Sound!

Watch this Wonderama Video on YouTube: <u>Debbie Berebichez Wows the Crowd with Cool Science!</u> (If needed, use the video title to search for this video)

Follow the steps for the experiment below to see how sound vibrations can move things.

What You Need:

- empty mixing bowl
- plastic wrap
- large rubber band
- large sugar crystals, like "Sugar in the Raw" (Note: Regular sugar will not work)

What to Do:

- 1. Wrap a sheet of plastic wrap tightly over the top of the mixing bowl.
- 2. Use the rubber band to hold the plastic wrap in place.
- 3. Put a few sugar crystals on the top of and in the middle of the plastic wrap.
- 4. Get close to the sugar crystals and say something loudly!
- 5. Watch what happens to the crystals, and fill in the blank below.

When I said ______ loudly, the sugar crystals ______.

The crystals move because the sound waves you created moved them! Now, use the chart below to say different things at different volumes and see how that affects the crystals. Circle "more" or "less" to explain if the crystals moved more or less than when you first said something loud.

Instructions on Sound	What I Said	The Crystals Moved
Whisper Something		More / Less
Louder		More / Less
Longer sentence		More / Less
Silly Sound		More / Less