

Vibration Observer

Today's DIY is an instrument in the sense of a device that helps to record or observe something.

Materials:

- A large bowl
- Plastic wrap
 - An elastic to fit around the bowl (if your plastic wrap isn't the super sticky kind)
- Sugar
 - Or sprinkles
 - Salt should also work
 - Beads might work

Instructions:

1. Cover the top of your glass bowl tightly with plastic wrap
2. Put a small amount of sugar on the top of the plastic wrap



How to Play:

Get as close as you can to the bowl without touching it.
Hum towards the bowl.

You should see the sugar start to dance. If you don't try humming louder or at a different pitch. You could also try making a loud noise nearby by banging on a cookie sheet with a wooden spoon. You should avoid actually blowing on the bowl, or hitting the bowl because that in itself could make the sugar move.

Here's a video of the experiment: <https://www.youtube.com/watch?v=j9lvcwZFx9s>

Notes:

The plastic wrap covered bowl will have its own natural resonating frequency. To make the plastic wrap vibrate you will need to make a sound that matches that frequency or any of the harmonics of that frequency.