

## Sound Experiment Tips

Read below for extra tips to help you complete your science experiments.



### Wind Ensemble

- Bagpipe Assembly:
  - Cut long strips of tape (around 6 inches) ahead of time before attempting to wrap tape around the glove.
  - Be sure to cut only a tiny slit in the glove's thumb—no longer than quarter inch.
  - After attaching the glove, check for leaks. To check, blow into the straw once to feel and hear if any air escapes. If there are leaks, add tape around the opening of the glove and around the slit in the thumb.
- How to Play:
  - If you are right-handed, hold the tube in your left hand where the straw meets the glove. Reverse the order if you're left-handed. Push the tube into the glove while pulling on the thumb of the glove in the opposite direction (toward your mouth).
  - The glove's rubber should be taut across the opening of the tube and the straw should be almost parallel to, and directly above, the tube. When you blow through the straw, the glove should inflate. Make sure you don't pinch the straw, or else you might block airflow to the glove. The bagpipe should make a deep horn-like sound. Watch to the experiment video to hear what it should sound like.
- Harmonica Assembly:
  - Be careful while assembling, as the rubber bands may snap.
  - When stretching the large rubber band, wrap one end of the band onto the craft stick. Squeeze these ends together while you stretch the other end of the rubber band to the other side.
- How to Play:
  - Blow between the two pieces of straw. Try blowing in different spots, but always between the two straws. Adjust the location of the straws by moving them closer together or further apart.
  - Try flipping your harmonica over or turning it around to play it.



### Speaker Cube

- Taping each tab of your cube will help it stay together. The tabs should be hidden inside the box.
- Remember to only connect the wire's jack to approved sound-making devices, like a tablet or smartphone.



### Seeing Sound

- To keep the spool from sliding, place strips of tape on the paper end of the spool and attach to the wooden dowel to secure. Repeat on the other side of the spool. You do not want the spool to slip or slide when you spin the dowel.
- Be careful, as the rubber bands may snap.
- If it is too difficult to strum the bands and spin the spool at the same time, ask a friend for help!