



### Straw Instrument: Trombone

4. How do you make the lowest possible pitch with your straw trombone?
5. How do you make the highest possible pitch with your straw trombone?

### Straw Instrument: modification

6. Test how your straw instrument sounds after you cut about 1 inch off the end.
7. Keep cutting 1-inch sections off and compare how the sound changes.
8. Think about resonance – the natural frequency of something, or the frequency it likes to vibrate at. Where do you think the resonance is happening in your straw instruments? *Hint: what determines its pitch?*

### Water Bottles

9. Now use the water bottle. Blow over the top of the water bottle until you have a tone. Would you describe it as a low pitch or a high pitch?
10. What kind of instrument does the bottle remind you of?

11. Figure out how to make a new town with the same water bottle. Describe what you did to change the tone.

12. Where is the resonance happening with the water bottle instrument?

13. Would the straw instrument and the bottle instrument be woodwinds, strings, percussion, or brass? Look at [www.dsokids.com](http://www.dsokids.com) for information. Look under “Listen By Instrument.”