

Winds

If you are using different sizes of bottles, how does the size of the bottle seem to affect the sound? Does the shape of the bottle (for example, the length or width of the neck) seem to have any effect on the sound? Is pitch, amplitude, or tone quality affected?

If you are using bottles that are all the same size, how does the amount of water in the bottle change the sound?

What do you think causes the effects you have found?

How is the bottle like a wind instrument, and what are the main ways that it is different from a wind instrument?

How would uncovering a hole in a woodwind instrument change the sound?

Why?

When a brass instrument valve opens, the air goes through an extra length of tubing. How would this change the sound of the instrument, and why?