

Singing Glass

Wine glasses aren't just for wine. Learn how to make them sing!

Supplies:

- Wine Glasses- the more the better (not all work – experiment to see which work best!)
- Water
- Tape
- Pen

Instructions:

1. Wash your hands to get any dirt off so they are squeaky clean.
2. Fill the glass about half way with water.
3. Take your pointer finger and dip it into the water; then with slight pressure, run your finger in a circular motion along the rim. If it feels too dry, just give you finger another dip!
4. The key is maintaining the same amount of pressure as you move your finger along the rim. And pretty soon you will have a new musical talent! Just remember the three things needed to make that glass sing: **moisture, pressure** and **glass type**.
5. Now that you have mastered making your glass sing, it's time to start experimenting! Using the tape, mark where the water level is. Add or take away some water and listen to how the sound changes.



Nicely done! You have gained a new musical talent. Practice creating different tones with multiple glasses and water levels, and host a singing glass concert for you family!

Why does the glass sing?

As you run your finger along the rim of the glass you are following the principle of “stick and slide”. This action occurs in very short intervals. If you pay close attention you can even feel these moments. This causes the crystal structures in the glass to vibrate which in turn creates the ringing we hear. The pitch (highness or lowness of the sound) can be changed by removing or adding water to the glass. Increasing or decreasing the pressure of your finger will lower or increase the volume (loud or quiet).

Moving Toothpick Challenge

If you're looking for a challenge, try this one. Take a toothpick and two identical wine glasses. Fill each glass with the same amount of water. Position the glasses almost touching each other. Place the toothpick on one of the glasses. Now make the other glass sing. See if you can get the toothpick glass to pick up the vibration and move the toothpick!

