



Try This **EXPERIMENT** @ Home!

Build your own Clucking Cups!

You will need:

- A plastic disposable cup
- A length of thick string or twine
- Paper towel (or cleaning cloth)
- Water
- Pencil or drill for making a hole in the cup

Step 1: Punch a hole in the bottom of your disposable cup, and thread the string through. Tie a knot on each end.

Step 2: Cut two lengths of the cloth and tie one to each knot on your string. Pull the string tight so that one piece of cloth is touching the cup and the other is as far away from the cup as possible.

Step 3: Holding the cloth, run it quickly down the length of the string (from the cup downwards). Listen to the sound that is created! Wet the cloth and repeat the pulling action on the string. Is the sound different now?



STOP & THINK – What is the difference between the sounds when the paper towel/cloth is wet and dry? What would happen to the sound if the cup used was bigger??

What's happening?

Sound is created by vibrations in the air, and the cluck cup creates a *lot* of vibration. When you move the cloth down the string it creates friction, causing vibrations which are amplified by the cup. When you wet the cloth, the contact on the string is increased and the vibrations are changed, therefore the sound appears to be louder! Lots of instruments use the same process of vibration to create music!

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