

Cackling Cups

A spooky way to celebrate Halloween.



What you need:

- A cardboard cup
- A piece of string
- Some Blu-tack
- A pencil
- A damp J cloth
- Stickers and pens to decorate



What to do:

1. Place your cardboard cup on top of a big lump of Blu-tack and press a pencil all the way through the bottom of the cup to make a hole.
2. Thread a piece of string through the hole and tie a knot so that the string doesn't pull out of the cup.
3. Run your fingers along the string. What does it sound like? Now take a damp cloth and run that along the string. What does it sound like now?
4. When you've made your cackle you can decorate it.... we made ours into a scary witch's head!

What is happening?



When you run your fingers along the string, you make the string vibrate. The vibrations travel up the string to the cup and because the cup is in contact with more air, it amplifies the vibrations so we can hear them.

Without the wet cloth, the vibrations sound like heavy breathing but with it, it sounds more like a cackle. This is because there is more friction between the wet cloth and the string, which snags and catches and makes the string vibrate in a different way.

Tips:

Try different sized cups and different types of string. Do they all sound the same?