

### What do I need:

- String
- Plastic cup
- CD or DVD



# Screeching Science In A Cup

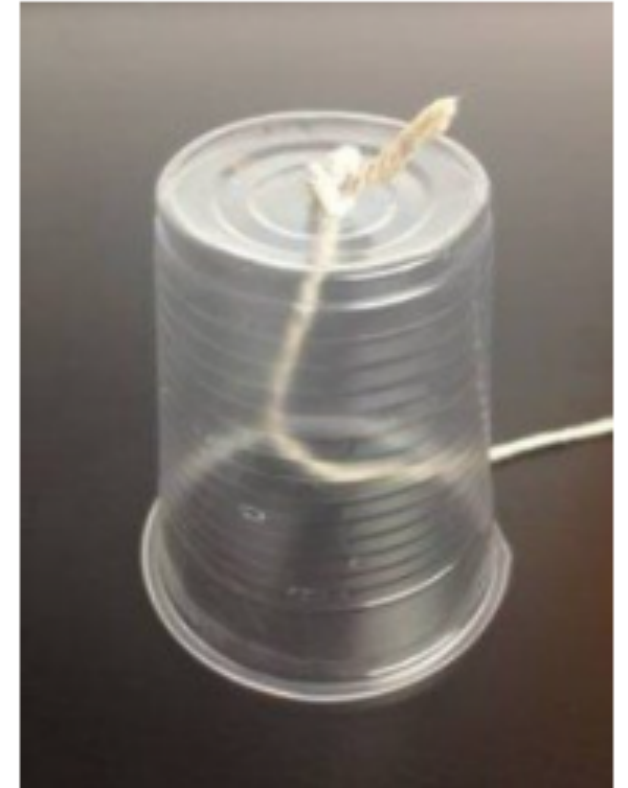


### How do I do it?

**STEP1** - First of all make sure an adult helps you to make a small hole in the bottom of the cup. This can be done easily with a pair of compasses or more carefully with a pair of scissors.

**STEP2** - Cut a 30cm length of string and tie several knots in the end of the string, so there's no way it will slip through the hole.

**STEP3** - Time to get screeching! First make sure you really wet your hands and wet the string a little bit with some water. Then pinch the string between your fingers and pull smoothly down on it to make the screeching sound!





# What's going on?!

Every single sound you ever hear in your whole life is caused by a 'vibration'. When someone talks their throat vibrates. When you bang a drum, the skin of the drum vibrates and it's that vibration that causes the noise.

In this case the string is vibrating and the sound is being amplified by the cup. This is like the age old idea of making a 'telephone' out of plastic cups and string!





## More Fun Please - Experiment like a real scientist!

- Does it have to be string that you use, what other materials could you try?
- How does the sound change if you use a bigger or smaller cup?
- What about the length of string, does that make a difference?

