

4 years+ and 5 years +

# Exploring Sound

## Activity #1: Cup Telephone

### Objectives

- To learn the basics of sound and notice how sound is transmitted through the tightly-pulled thread and the cups.
- Feel the vibration of the thread and the cups.
- Experiment with different lengths of threads.

### Materials:

- 2 paper cups
- 1 piece of string, yarn, or thread



### Directions

1. Poke a hole at the bottom of each paper cup
2. Put the thread through the hole and tie it up
3. Make sure the thread is pulled tight so that sound can transmit



## Activity #2: Homemade Speaker

### Objective:

- To learn the basics of sound and notice it is transmitted.

### Materials:

- 1 toilet paper roll
- Scissors
- Phone



### Directions

1. Cut a rectangular hole in the toilet paper roll to fit the cellphone (adult help needed)
2. Stick the phone in
3. Play music from the phone and enjoy!

\*Decorate or paint the toilet paper roll to make it look nice!



### Observe and Wonder:

Feel the vibration of the toilet paper roll

### Why does it work?

The sound has been redirected to come out through a smaller and more concentrated outlet

### Up for a bigger challenge?

Try this upgraded version! (Need 2 paper cups)



Source: Tiparium

<https://www.youtube.com/watchv=UBvSYRz81BA>

## Activity #3: Musical Jars

### Objectives:

- To notice the vibration of sound
- To hear the difference in sound pitch
- Create some music!

### Materials:

- Empty glass jars or drinking glasses of the same size (3 or more, as many as you wish)
- 1 metal spoon
- Water
- Optional: food coloring

### Directions

1. Tap each of the empty glass jar to hear the sound (they should be the same)
2. Put in different amount of water in each jar
3. Optional: put food coloring in the water to better see the different levels
4. Tap each of the jar to hear the difference in sound



### How and why does it work?

The tapping caused the water to vibrate  
The more water in there, the less it will vibrate, creating a lower sound

