**Station 1—Tuning Forks**

1. Hold the tuning fork by the base. Strike the end of the tuning fork against the rubber stopper and hold it close to your ear. (Do not hit the table or other hard surfaces with the tuning fork.) What do you hear?

2. Strike the tuning fork and put the base of the tuning fork on top of the pan turned upside down. Is there a difference from the sound in #1? If so, what is the difference?

3. Strike the tuning fork against the rubber stopper again and lightly touch the prong with your fingers. What does it feel like?

 4. Strike the tuning fork and then slowly dip the ringing end of the fork into the glass of water.

a. What happens?

b. Why do you think this happened?

**Station 2—Sound Through the Bags**

1. Lay one of the bags on the table.

2. Gently place your ear so it is resting on the bag.

3. Have someone in your group knock the table with their knuckles.

How does it sound?

4. Switch bags so you have a different material. Try the same process again. Can you still hear the sound with this different material? Does it sound different?

**Station 3 – The Speaker**

1.Turn on the iPod. Can you hear sound coming out of the speaker?

2.Take the pan and place it on top of the speaker. Make sure there is some cereal in the pan.

3.Turn the sound back on again. You may need to turn up the volume on the iPod. **What do you see happening?**

**Station 4 – Different Tuning Forks**

1. Look on the tuning fork. Somewhere on there, there should be a number, followed by some letters. **What are the numbers and letters on your tuning fork? What wave measurement does number tell you? Think about the units!**

2.Talk with the other people in your group. What other numbers do the other people have on their tuning forks?

3.Take turns passing these different tuning forks around. Look at the number on each one and listen to each tuning fork. **What relationship do you notice between the number and the sound it makes?**

**Station 5: Phone Cups**

1. Move the two cups away from each other until the string is stretched fairly tightly. Be careful! If you pull too hard you will pull the string out of the cup and break this device! Also, make sure that you are holding the cup so it is straight out from the string, and not bending the string at all.

2. Have one person place their ear into the cup and cover their other ear with their other hand.

3. Have the other person hold the cup up to their mouth and talk into the cup. **What does the first person who is listening hear? What does it sound like?**

4. Now switch. The person who was listening will now speak, and the person who was speaking will not listen.

5. Now take the string from one of the phone cup sets, and wrap it around the string of the other phone cup set.

6. Have three people listen in their cups and have one person speak into a cup. **Can the people who are listening hear anything?**