Interactive Exhibit: **Whisper Dishes**

*Description:* Whisper and listen with a friend using these curved (parabolic) dishes. Each dish gathers and projects the sound of the other. The dishes reflect sound just as mirrors reflect light. The point where the sound is gathered is called the *focus point*. The focus point is located within the round plastic circle on the arm that sticks out from the center of the dish. The closer your lips and ears are to the focus points of the dishes, the better they work!

*Information:*
- Suitable for all grades; especially fascinating to younger children.
- Participants should whisper for proper effect.
- No particular maximum of participants per session; organization of lineup and taking turns highly recommended.
- About 15 minutes.

*Components:*
- Imagine if you had ears the size of these Whisper Dishes!
- Smaller versions of these dishes are used by naturalists to record birds and other wild animal sounds. Parabolic dishes also are used to capture the sound of a distant player at sporting events, such as golf tournaments and football games.
- We encounter parabolic reflectors every day. The reflectors in flashlights and car headlights gather and project light in a similar manner to which these Whisper Dishes gather and project sound.
- Astronomers use large curved parabolic mirrors to gather and focus light from distant stars and galaxies. The observatory telescopes at Brevard Community College use parabolic mirrors, as does the Hubble Space Telescope.

*Sunshine State Standards Addressed:*

**3rd Grade:**
- 3.P.10.1 Identify some basic forms of energy such as light, heat, sound electrical and mechanical.

**4th Grade:**
4.P.10.1 Observe & describe some basic forms of energy including light, heat sound, electrical and energy of motion.

5th Grade:
• 5.P.10.1 Investigate & describe some basic forms of energy including light, heat sound, electrical, chemical and mechanical.

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