



Can You Hear Me Now? Design Challenge

Materials:

- Paper Cups
- String
- Poster Board
- Paper towel rolls
- Cardboard pieces
- Flashlights
- Scissors
- Pencils
- Paper
- Empty coffee cans with lids
- Access to Google Drawings (Optional)
- Tap
- Glue
- Device to take pictures (Optional)

Description: In this activity students will use various materials to create a device that can send a message to their classmates over a distance.

Standards:

Next Generation Science Standards

1-PS4-4: Use tools and materials to design and build a service that uses light or sound to solve the problem of communicating over distance.

Procedure:

1. Break the students up into small groups.
2. Allow the students to explore the materials and start to brainstorm how they can use them to create a device to send a message over a distance.
3. Using the engineering design process, have the students design and test their device. Make sure to have them document their process in Google Drawings, by taking pictures, or in a paper journal.
4. When they are satisfied with their invention, or when time runs out have the students present their devices.

Extension:

Have the students create a marketing campaign to sell their device.