

# Making Maracas

*Topic: I Can hear –Sound Time: 20 min Age group: 3 - 5* 

### What you need

- Empty, clean soda or water bottles (about 20 ounces), with a screw-on cap (each child will need two)
- Sand, salt, pebbles, birdseed, rice, beans, small beads, large beads, dried pasta, dried peas, small washers, paper clips, small erasers.
- Optional: Ribbons, cardboard, markers for decorating.

# What to do

#### Set up

• Have all your materials at hand

#### Activity

Maracas are rattles played by shaking them. People usually play two maracas at the same time. Ask children if they've ever seen or heard them before

- Hand each child two empty bottles and tell them that they will make two maracas by filling the bottles with some of the small objects on the table.
- Allow children to choose which small objects they want to fill their maracas with.
- Each filling produces a different sound, so that may also be part of your plan for creating your set of maracas. For instance, sand or salt maracas will be very quiet. Dried beans, macaroni or large bead maracas will be louder.
- Encourage them to test the sound as they work, adding or subtracting objects until they achieve a sound they like. When they're done, have them screw on the cap and play their maracas.
- If there's time, they can decorate their instruments by drawing on construction paper and fastening their drawings around the bottles, using tape or adding ribbons for decoration.









# The science

- An action has to take place in order for a sound to occur.
- Different objects make different sounds.
- Sounds vary by volume (loud or soft) and pitch (high or low).
- A sound becomes louder when the force of the action that is creating the sound is increased and softer, or quieter, when the force is decreased.

#### Things that vibrate send out soundwaves.

**Frequency** is determined by how fast the sound producing objects vibrates.

**Pitch** is how high or low a sound is. Pitch depends on the frequency of a sound.

**Loudness**. The loudness of a wave depends on its energy. The greater the energy the louder the sound. The greater the energy the greater the amplitude (height) of the sound wave.

# Science talk

#### Description words

Use and repeat descriptive words such as fast, slow, loud, soft, quiet, rattle.

#### Science process words

Observe, notice, compare, same, different, change, test, and predict.

#### Open ended questions

Give them a challenge:

- Can you make two maracas that sound very different from each other?
- What are some ways you can make the maracas sound different?

### Skills

Observing, predicting, recording, learning about sound and vibrations.

# Stay Safe

• Keep an eye on the small objects, to prevent children swallowing.

# Ways to document

Create a chart or table to document objects that make loud, louder vs soft, softer sounds.

# Extending the activity

Maracas can help children to develop in a number of ways. The process of holding and shaking the maracas improves fine motor skills, and being able to make their own music is a great way to encourage creativity. Shaking maracas to a song or tune encourages children to listen to rhythm, and anticipate how the song will change. It can also help to improve memory.

Start a maraca parade. Line the children up and set a rhythm. Then have them walk around the classroom or playground, shaking the maracas to the rhythm. This helps to develop coordination, and the ability to multitask.

#### Other science and cross curricular links

Literacy. Music.



