



# Instrument Workshop

The natural world is full of music, from the rhythmic sound of rain falling to the pitched melodies of bird songs. Add your own tune to nature's soundtrack by making three simple musical instruments—"claves," a "shaker," and a stick "xylophone"—out of natural materials you find outside.



## Materials

*Please note: Take only a small amount of any natural materials you find, and only things that have already fallen to the ground. Also, be sure not to disturb any animals' homes!*

12–20 sticks of different sizes and shapes

Natural materials (small amount of grass, pinecones, seeds, etc.)

Rocks or gravel, about one handful

String (or any material to weave and tie like twine or yarn)

Paper

Crayons, markers, or colored pencils

Tape or glue

Jar or can (plastic or metal, with a lid or something to enclose the end)

## Directions

### 1. Make “claves”

- Select** two sticks from your supplies that are about one inch thick.
- Break** the sticks so they are about 8–12 inches long (short enough to hold one in each hand easily).
- Hit** the sticks together! What do you hear? “Claves” make a sharp click sound.
- Try** sticks that are longer, shorter, thinner, or thicker. Are the sounds different?



### 2. Make a “shaker”

- Add** a handful of gravel into your can or jar. You can add other hard materials like seeds or bits of sticks, but leave lots of room for material to move around.
- Close** the top with the lid or a piece of cardboard and secure it with tape. Make sure it's closed up really tight!
- Decorate** your paper with crayons, markers, or anything else. Then, wrap the paper around the can or jar and secure with tape or glue.
- Shake** your “shaker”! What sounds do you hear? A shaker keeps time, like the “claves,” and helps musicians play together while making different sounds.
- Try** different materials to make different sounds! Does gravel in a can sound different than gravel in a jar? What about using stick pieces instead of gravel? Try making a shaker from a piece of hollow wood, or use cardboard to make a cool shape.



### 3. Make a “xylophone”

- a. **Gather** 12 sticks of different sizes, breaking sticks into different sizes if needed.
- b. **Lay** the 2 longest sticks on the ground, one a few inches above the other.
- c. **Lay** the sticks in order of size, from shortest to longest on top of the 2 longer sticks so they look like train tracks.
- d. **Tie** the sticks on top to the parallel sticks below using string or a similar material. After you tie each one down, you can weave them together and tie it once more until secure. (This is the hardest part, so you may need to ask for help!)
- e. **Drag** another stick across the center of the “xylophone,” hitting each of the different “keys” along the way. What sounds did you hear? Do you notice a difference from stick to stick?
- f. A “xylophone” can play different pitches of sound, like the different pitches in a bird song. Different-length pieces should make a different sound. Which stick makes the highest sound, like a bird tweet? Which one makes the lowest sound, like thunder? Try to make a “xylophone” with different amounts of sticks and lengths.



### 4. Play together!

- a. Using your instruments, try to make sounds in a repeating pattern. A fun way to practice is to count from 1 to 10, making a sound with the instrument each time you say a number.
- b. Got that down? Try to count from 1 to 4, over and over (1, 2, 3, 4, 1, 2, 3, 4, 1, 2...), making a sound on each number. This is a basic music rhythm. Invite friends and family to join your “band”!
- c. Listen to the world, be inspired, and fill your life with the music of Earth!