

# JR-ENGINEERS

## WATER XYLOPHONE

**This water xylophone sound science experiment is truly a must do classic science activity for young kids.**

### INSTRUCTIONS

**STEP 1:** To get started, fill the jars with varying levels of water. More water equals lower sound or pitch and less water equals a higher sound or pitch.

(Make sure to have your kids tap the empty jars first to get an idea of the starting sound! Have them predict what will happen when they add water.)

**STEP 2:** Add food coloring to make different colors for each note.

**STEP 3:** Use your sticks to make sounds with your 'instruments'. Try tapping the top of each jar, and then the side. Do they sound different?

### SUPPLIES

**Water**  
**Food coloring**  
**Wooden sticks**  
**4+ mason jars**

### THE SCIENCE

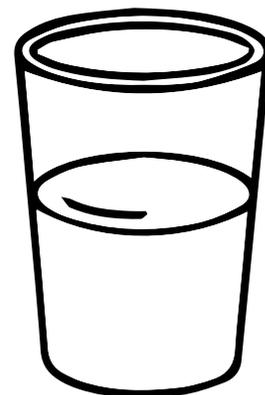
Sound waves are vibrations that travel through the medium which in this case is water! When you change the amount of water in the jars or glasses, you also change the sound waves!

Adding different amounts of water changes the noise, sound, or pitch. What did you notice about the amounts of water versus the sound or pitch that was created? The more water, the lower the pitch! The less water, the higher the pitch!



# Xylophone Observations

Use this worksheet to process and evaluate your work.



What did you notice about the amounts of water versus the sound or pitch that was created?

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Does the type of container make a difference to the sound? Why or why not?

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Does the type of stick or mallet make a difference to the sound? Why or why not?

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What did you learn?

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