

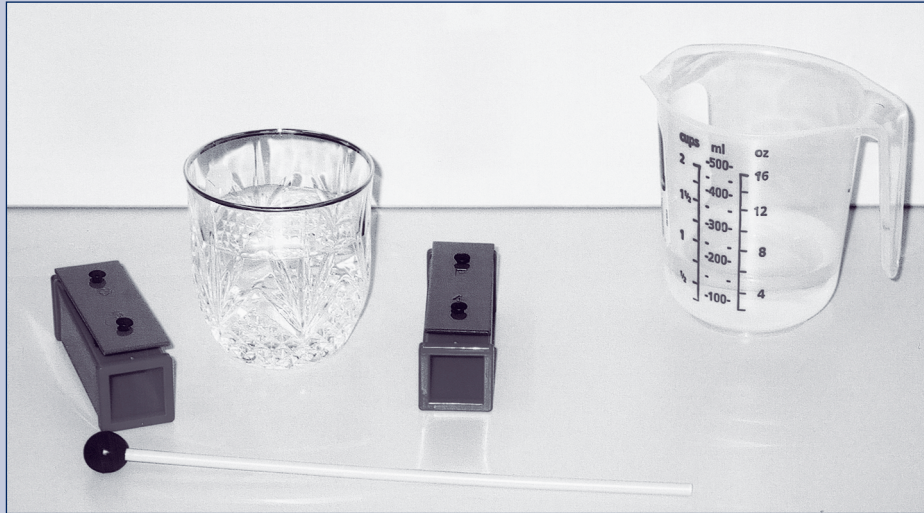
## Water Music

**Approach:** One to one

**Level:** Year 4 and year 8

**Focus:** Adjusting water level in a glass to try to match pitch of a chime bar.

**Resources:** Water bottle, jug of water, F chime bar, G chime bar, beater, crystal glass tumbler.



% responses  
y4 y8

**Question/instructions:**

**Place chime bars F and G and beater in front of student.**

When you hit chime bars they make a sound. These two chime bars make different sounds. Play them now so that you can hear the sounds they make.

**After student has played each chime bar, place glass tumbler and jug of water in front of student.**

When you tip water into a glass and hit the side of the glass, it makes a sound. You can change the sound by changing the amount of water in the glass.

**Temporarily remove the F chime bar from the student.**

In this activity you are going to tip water into the glass to make a sound. First, try to make the same sound as you hear when you play the G chime bar. When you are putting water into the glass you will need to keep checking the sound by hitting the side of the glass AND the chime bar. If you think there is too much water in the glass you can tip some back into the jug. When you think they are both making the same sound, tell me.

**Student attempts to make chimebar G sound with the water in the glass.**

		% responses	
		y4	y8
<b>Matching the G</b>	very close	6	13
	moderately close	19	29
	moves in right direction	33	33
	no useful progress	42	25

**When completed, remove chime bar G and replace with chime bar F.**

**Tip water back into jug.**

Now see if you can make the same sound as the F chime bar. Tell me when you think the glass and the chime bar are making the same sound.

**Student attempts to make the F sound with the water in the glass.**

		% responses	
		y4	y8
<b>Matching the F</b>	very close	3	12
	moderately close	12	22
	moves in the right direction	42	37
	no useful progress	43	29

**Commentary:**

Despite care to choose crystal glasses that “rang” well, most students struggled with this task. More than 40 per cent of year 4 students and 25 percent of year 8 students made no useful progress (their adjustments of water level seemed almost random).