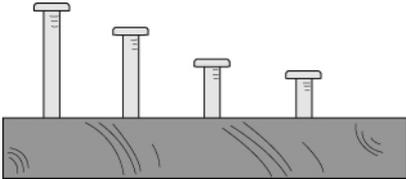
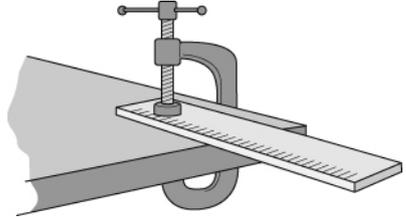


**Aim:** You are going to find out how the length of an object affects the sound it makes.

<p><b>A</b> Blow across the top of the empty bottle. Add some water to the bottle and blow across the top again. Repeat with even more water in the bottle</p>	<p><b>1</b> What is vibrating to make the sound? <b>2</b> How does the sound depend on the amount of water in the bottle? <b>3</b> What should you keep the same to make the test fair?</p>
<p><b>B</b> Tap the different nails.</p> 	<p><b>4</b> How does the sound depend on the length of the nails?</p>
<p><b>C</b> Tap the wind chimes.</p>	<p><b>5</b> How does the sound depend on the length of the wind chime?</p>
<p><b>D</b> Drop each piece of wood onto the floor. Be careful not to drop them on your feet!</p>	<p><b>6</b> What do you have to keep the same to make this a fair test? <b>7</b> How does the sound made by the wood depend on the size of the wood?</p>
<p><b>E</b> Twang each rubber band.</p>	<p><b>8</b> How does the sound depend on the thickness of the rubber band?</p>
<p><b>F</b> Twang the ruler against the edge of the table.</p>  <p>Change the length of the ruler and make it vibrate again.</p>	<p><b>9</b> How does the sound change when you change the length of the ruler?</p>

### Considering your results/conclusion

**10** Write a conclusion that sums up all your findings.

#### I can...

- make careful observations
- draw a conclusion.