

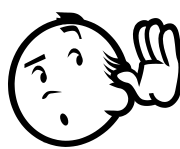






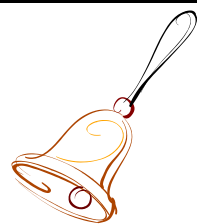



Purpose 	<p>To determine what makes a sound LOUD or <i>soft</i>.</p>
Hypothesis 	<p>I will hit the spoon against the table once <i>softly</i>.....once HARD!</p> <p>I think the <i>soft</i> hit will make the sound I hear:</p> <p>Circle one:</p> <p>LOUDER or Quieter</p>  
Materials 	<ul style="list-style-type: none"> metal spoon (thick, heavy spoons work best) kite string, 30 inches
Procedure 	<ol style="list-style-type: none"> 1. Tie the handle of the spoon at the mid point of the string. 2. Wrap the ends of the string around your index fingers. <i>Be sure that both strings are the same length.</i> 3. Place the tips of your index fingers in each ear. 4. Lean over so that the spoon hangs freely & very gently tap the spoon against the side of a table. 5. Repeat the previous step, but hit the spoon firmly against the table.
Results 	<p>I heard a bell sound when I tapped the spoon against the table.</p>  <p>A <i>soft</i> hit makes the sound LOUDER/quieter</p>  <p>A HARD hit makes the sound LOUDER/quieter</p> 
Conclusion 	<p>All sound is a form of wave motion that is produced when things vibrate (movement back and forth). Striking the spoon caused it to vibrate. The loudness or quietness of the sound produced by vibrating molecules depends on the amplitude (height) of the sound wave produced by the vibrating molecules. <i>The higher the amplitude of the wave the louder the sound.</i></p> 