

**Exploration 1: “How does MATTER affect Sound?”**

<b>Materials</b>		
Stethoscope	Container of Water	Desk

**Directions:**

- Gas vs Sound
  - o One person puts on the stethoscope (DO NOT tap or touch the end! A very loud sound will result.)
  - o Another person taps their fingers together next to the end of the stethoscope
  - o Record how loud the sound was in the chart
- Liquid vs Sound
  - o One person puts on the stethoscope and gently places the end in one end of the container of water
  - o Another person taps their fingers together in the water at the opposite end of the tub
  - o Record how loud the sound was in the chart
- Solid vs Sound
  - o One person puts on the stethoscope and gently places the end on one end of the desk
  - o Another person “Lightly” taps on the end of the desk opposite of the stethoscope
  - o Record how loud the sound was in the chart

**Record your observations in the chart below:**

	<b>Little/No Sound</b>	<b>Some Sound</b>	<b>The Most Sound</b>
<b>Gas</b>			
<b>Liquid</b>			
<b>Solid</b>			

What state of matter had the most sound? \_\_\_\_\_

What state of matter had the least sound? \_\_\_\_\_

**Exploration 2: “How does MATTER affect Light?”**

<b>Materials</b>		
Clear jar & water	Piece of Cardboard	Flashlight

**Directions:**

- Gas vs Light
  - o One person shines the light on the wall
  - o Record how bright the light shone on the wall and what the gas did to the light
  
- Liquid vs Light
  - o Another person shines the light through the jar with water onto the wall
  - o Record how bright the light shone on the wall and what the liquid did to the light
  
- Solid vs Sound
  - o Another person shines the light through the cardboard onto the wall
  - o Record how bright the light shone on the wall and what the solid did to the light

**Record your observations in the chart below:**

	<b>Little/No Light</b>	<b>Some Light</b>	<b>The Most Light</b>
<b>Gas</b>			
<b>Liquid</b>			
<b>Solid</b>			

What state of matter had the most light? \_\_\_\_\_

What state of matter had little light? \_\_\_\_\_

