

Tuning Fork Experiment Sheet

Materials:

- Tuning Fork
- The edge of a table
- A full glass of water

Instructions:

1. Set up:
 - a. Find a work area with a table where you can conduct the experiment
 - b. Have a full glass of water nearby. Don't touch it yet!
2. Experiment Part One:
 - a. Gently hit the tuning fork up against the edge of the table. Observe what happens and record your observations in the table below.
 - b. Gently hit the tuning fork up against the edge of the table. Bring your hand to the tuning fork without touching it. Can you feel the vibrations? Observe what happens and record your observations in the table below.
 - c. Answer the Jamboard questions.
3. Experiment Part Two:
 - a. Gently hit the tuning fork up against the edge of the table. Bring the tuning fork close to the water without touching. What do you notice? Observe what happens and record your observations in the table below.
 - b. Gently hit the tuning fork up against the edge of the table. Bring the tuning fork so that the ends are just below the surface of the water. What do you notice? Observe what happens and record your observations in the table below.
 - c. Gently hit the tuning fork up against the edge of the table. Quickly dip the tuning fork deep inside the glass of water. What do you notice? Observe what happens and record your observations in the table below.
 - d. Answer the Jamboard questions.

Here is some important vocabulary. Try to use some of these words in your observations!

- **Energy:** The ability to do work
- **Potential Energy:** Stored energy an object has because of its position or state
- **Kinetic Energy:** The energy of motion that makes an object move
- **Energy Transfer:** The movement of energy from one place or object to another
- **Sound Energy:** Energy that we can hear which comes from the vibrations in matter
- **Collision:** When two objects come into contact with each other
- **Mechanical Energy:** the sum of all the potential and kinetic energy something has
- **Friction:** The resistance of motion when one object rubs against another
- **Speed:** How quickly an object changes position from one place to another
- **Mass:** An object's weight
- **Force:** A push or pull on an object

Observation Sheet: Experiment Part One

Trial:	Observations:
Trial A	It made a really loud cling it had sound energy
Trial B	When I put my finger on it this time it never felt like anything and I only her the cling but this time a clong

Observation Sheet: Experiment Part Two

Trial:	Observations:
Trial A	When I tapped against the table it and put it in the water the tuning for was like a magnet grabbing water it was Collision
Trial B	This time it was like looking so clear and it was growing bubbles
Trial C	This time it made really really loud noise and when I put the tuning fork in it was like plastic inside on top of water and was actually picking up bubbles it was like sound energy and transfer energy.