

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 or floor space 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	
Trial B	

Observation Sheet: Experiment Part Two

Trial:	Observations:
Trial A	
Trial B	
Trial C	