

True True True 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	when I hit it on my table and made a sound like this clean kind of like Sound Energy!
Trial B	when I put my finger to the tuning fork it felt like a vibrating and it felt very funny

Observation Sheet: Experiment Part Two

Trial:	Observations:
Trial A	II believe it's going to make the bubbles disappear and then they're going to be gone and then when I stop it it's going to end up almost back and when I hit it again the bubble but I think this is going to be energy transfer.
Trial B	that was so cool who wouldn't was by planning and it looks so very cool but look like energy transfer a lot of energy transfer because the water was vibrating and it looks like the energy from the music for a transfer energy into the water to make it vibrate do I think that was cool
Trial C	when I put the tuning fork all the way in the water it was kind of unexpected it didn't really do anything but I have the tuning fork on the side and it just looked play the electric eels in the water it was cool!!!!