Energy Experiment

Material

* Speakers
* Cup of water

Procedure- To perform this experiment simply increase the volume of the speakers and place the cup of water next to it. Observe how the volume of the speaker affects the water; also try changing the distance of the cup from the speaker. Did the distance have an effect on the water?

Observation- The water should vibrate more when the volume is higher and it should vibrate less when the cup is farther away. The sound energy is transformed from electric energy via the electric socket. The electric energy could be created by magnets, chemical energy (burning coal etc…), hydroelectric, solar, wind, etc…

Conclusion- The water vibrates more when the volume is high because sound energy is higher, and since sound is a wave its energy diminishes with distance. The reason the water moves is because sound is a mechanical wave, meaning it needs a medium to travel through. The medium is usually air, but sound can also travel through solid and liquid mediums.