**Kinetic Theory**

Today in Science class, we had a discussion and did a demonstration.

Microwave Ovens

In this discussion, Mr. Smith taught us how microwave ovens work. When you start a microwave oven, it sends out microwaves that move the atoms and molecules in whatever is inside it. This movement creates heat, but the microwave oven doesn’t actually use heat, like a conventional oven.

Radiometer

In this demonstration, Mr. Smith showed us a device called a radiometer. A radiometer is something that looks like a light bulb, but instead of having a filament inside, it has a regular sewing needle imbedded into some glass in the bottom of the “light bulb.” The top of the needle has a tiny glass cup on it, and there are four small metal rods coming out of it. Each rod has a little bit of sheet metal on it, one side black and the other white. The black side absorbs heat, and the white side bounces heat off of it. The heat bounced off of the white one hits the black one, and the whole inner part spins.

Things I learned:

* Water by itself is not a good conductor.
* It needs something else, salt for example, to be a good conductor.
* Heat energy is what moves atoms and molecules.
* The Kinetic Theory of Matter is that all matter is made of atoms and molecules that are in constant motion. This motion increases with temperature.
* Absolute Zero is when all heat is taken away from something, so all molecular motion ceases.
* Kinetic is a Greek word that means movement.
* Microwave energy makes molecules move.
* Cell phones use microwave energy instead of radio waves, because radio waves are more staticky.
* The problem with this is that microwaves do not bounce.

