Jake's Adventure

Hi, my name is Jake. I am an energy molecule and I am going to tell you how energy transforms. First, let me tell you about the "law of Conservation of Energy". The law of conservation of energy states that energy can not be created nor destroyed. It can only transform and trust me. I'm an expert, saying I've been around for around 7,000-10,000 years. To show you this, let me take you on an adventure. Right now I'm a molecule of potential energy in water waiting to fall into a dam. As I wait, let me tell you the difference between potential and kinetic energy. Potential energy is energy waiting to happen, like if you are holding a ball, it has potential energy. But if you throw it, it has kinetic energy, which is energy in motion.

Oh no, I'm falling, but now I have kinetic energy instead of potential energy. Now I'm going through the turbine and being converted into an electrical energy molecule. While I am in the wire traveling to a house, let me tell you about how water makes kinetic energy into electrical energy. The way this happens is when the kinetic energy moves that water through the turbine, it then turns a magnet around a copper coil producing electric energy. But only some of the kinetic energy is turned into electrical energy. The rest stay in the water as it continues to go downstream.

Oh look! I'm just about to go into a house and power a light bulb. Look how hot I am.

Now a few of my friends and I are thermal energy while the rest of my friends are light molecules. Now, I will travel into the atmosphere and transform into another molecule. The cycle

just goes on forever. I have been through this cycle many times. But every time the cycle is different. I hope the "Law of Conservation of Energy" makes more sense to you now. Till next time!!!

The End