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Hydrogen: The Clean Energy of Today

This year's project is a continuation to gain new knowledge and to collect information about the use of transforming water into hydrogen. The hydrogen gas is used to fuel the fuel cell which in turn produces electricity to light a LED light.

The idea behind this experiment was to use a solar panel to power an electrolyser. The electrolyser splits the water into hydrogen and oxygen. The atoms traveled in gas form to the fuel cell therefore creating electricity to power a model home and a load measurement box.

The procedure was conducted to determine whether a fuel cell could produce enough electricity from hydrogen and oxygen atoms to power a model home and a load measurement box.

The data proved from this experiment is the 2:1 ratio. The 2:1 ratio is the ratio of hydrogen and oxygen atoms (H₂O). The 2:1 ratio will be used in this experiment from the transformation of distilled water to hydrogen and oxygen atoms. This was proven when the solar panel was left in the sun for five minutes, and the electrolyser would create 10mL of hydrogen and 5mL of oxygen.

It was determined in this experiment that the fuel cell produced enough electricity to power a model home and a load measurement box.