

Ohio Energy Project

Portsmouth City Honors Physical Science

Tiffany Estep

Our students measured the temperature of the original light-bulbs in their homes and replaced them with LED bulbs and observed the temperature change. Next, they measured the temperature of their refrigerators and freezers and adjusted the temperature if necessary. They tested the seal of their refrigerators and freezers to check for loss of energy. Lastly, they tested the water amount being used in their homes and changed the water faucets to conserve water if needed.

All the aforementioned was done to encourage energy savings to individual households which in turn increased financial savings in our home.

Our Goal

Our goal for the future is to prosper in knowledge to increase and better our well-being and social welfare. We need to save our natural resources to help better the lives for our future generations. Ultimately, we can produce a better environment for our Earth, state, community, and home. These changes will allow us to personally better our lifestyle for the greater good of society.



Student Leadership

Our team of ten energy saving members encouraged their fellow classmates and community members to utilize their energy saving kits in their individual homes.



Scioto County Energy Fair



Classroom Energy Laboratories

We used the skills and tools we gathered from the Ohio Energy Fair within our classroom environment. For example, we used a thermal imaging camera when studying the Law of Conservation of Energy. Our classroom also used the sound kit when studying sound waves to achieve a better understanding of waves, amplitude, and pitch. In our classroom, we used the light reflection and refraction activities when studying the behavior of waves.

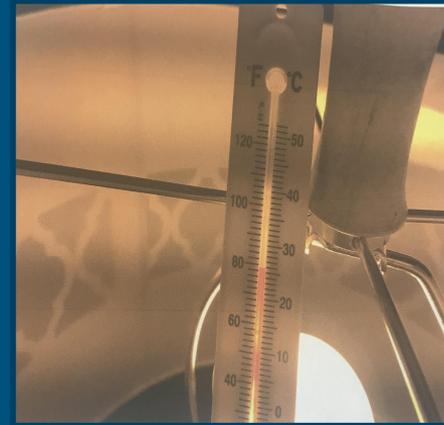
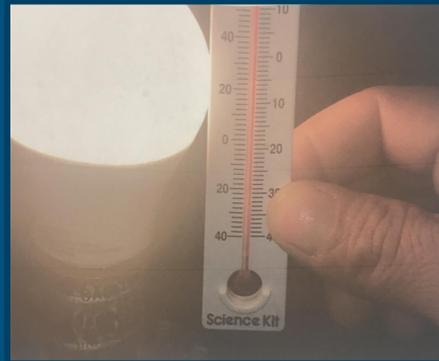
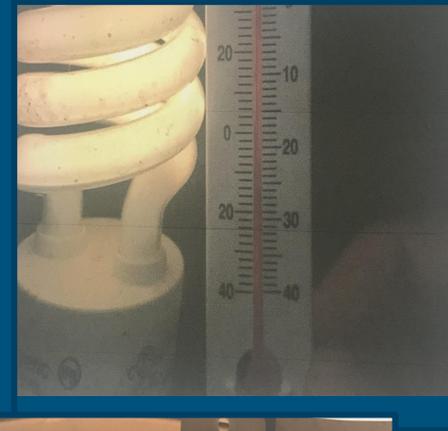


Saving Energy at Home - Lighting Investigation (Goal)



Our goal in using energy-efficient light bulbs is to reduce the amount of traditional incandescent light bulbs being purchased. Energy-efficient light bulbs use 25%-80% less energy and can last 3-25 times longer than incandescent bulbs. Because of this, we are saving money, light bulbs, and energy. By reducing the number of light bulbs purchased, we are also creating less waste in our environment.

Results Achieved

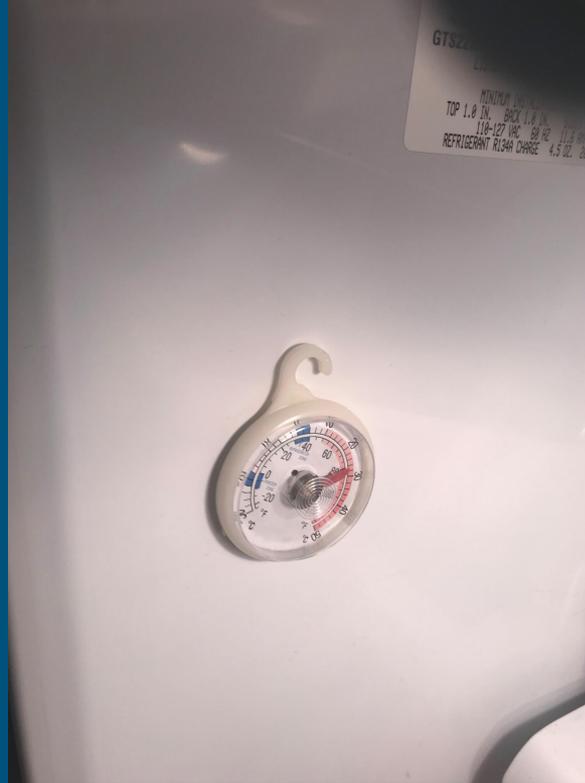


Saving Energy at Home - Refrigerator/Freezer Investigation (Goal)

Our goal was to measure the temperature of our refrigerators and freezers and adjust to save energy resources accordingly. Our energy team then tested the seal of our refrigerators and freezers to check for loss of energy. Saving energy resources that are lost due to improper insulation and inappropriate temperatures aids in our mission of energy conservation.



Results Achieved



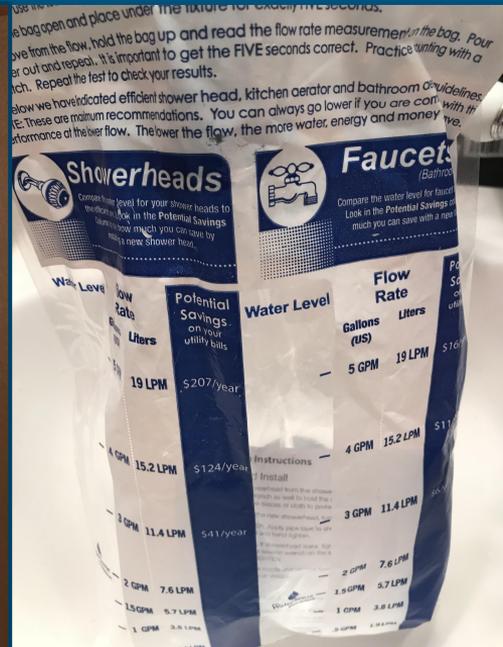
Saving Energy at Home - Water Conservation (Goal)

Our goal is to reduce the use of our non renewable resources. In

**Portsmouth, we use natural gas, coal, and propane to heat our water. If we
use less water we will be saving our non-renewable resources.**



Saving Energy at Home - Water Conservation (Results)



Activities Completed

Energy Kit Activities Completed Include :

- Weather Stripping
- Energy Saving Showerhead
- Water Faucet Replacement
- Energy Saving Night Light Installment
- Light Bulb Replacement
- Energy Saving Appliance Identification
- Water Heater Temperature Card
- Insulation, Heating, and Cooling
- Refrigerator/Freezer Energy Check

