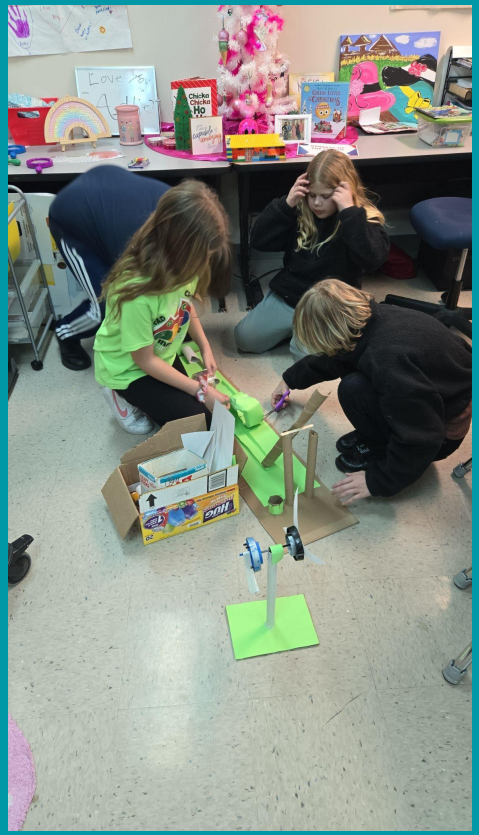
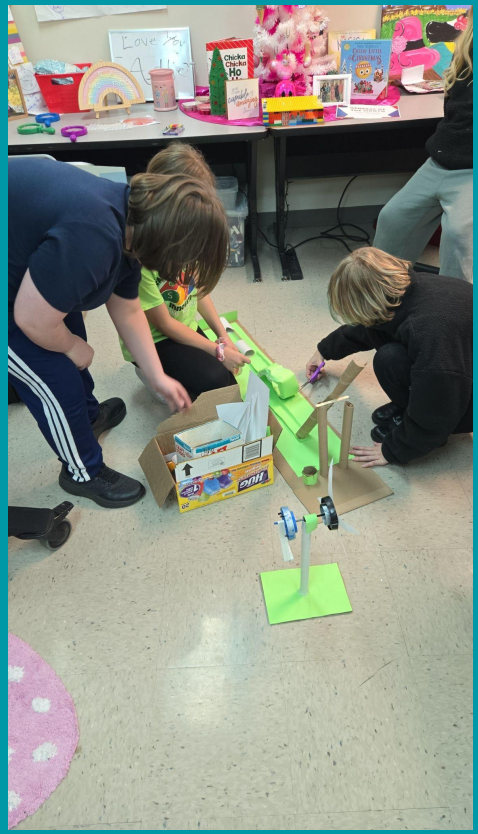
The Environmental Energy Heroes Project #1306

Addie, Aprilynn, Faith, J.P, Nova, Kennedy.

STLP KENTUCKY

Energy Station Construction





Our mission is...

to help find new ways to use different types of energy to help save the environment.

Our plan is....

We plan to construct and create interactive energy stations in and around our school to teach our community about energy.

Why are we doing this...

To help others see the energy types and models and see why an how they are important to the environment.

The technology that we used for our project

Technology:

- Google slides
- Google Slides Visualizer
- Canva
- google
- google survey
- you tube
- school website
- schools facebook page

Sources so far:

- Solar Schools
- Department of Energy
- Bureau of land management

Conserving energy

Human-Powered Conservation

One way we can conserve energy by taking a bike and tie it to some wires that connect to whatever device you want like a light or a lamp or a phone charger. It is healthy for the environment, and you will get a nice workout. Make sure it's an electric one!

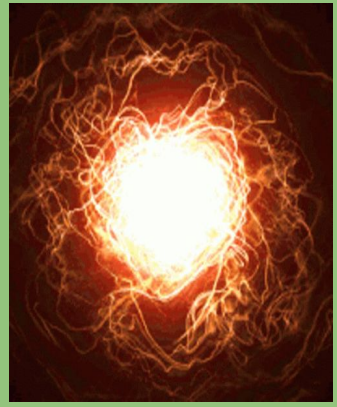
What is Energy Conservation?

Energy conservation is when energy is stored in a item, for example, when you eat you store energy or energy is conserved!!!

Types of Energy

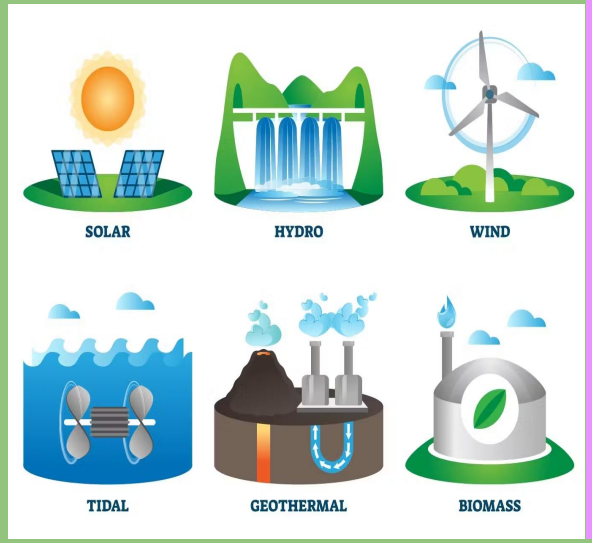
This is a few types of energy you use every day

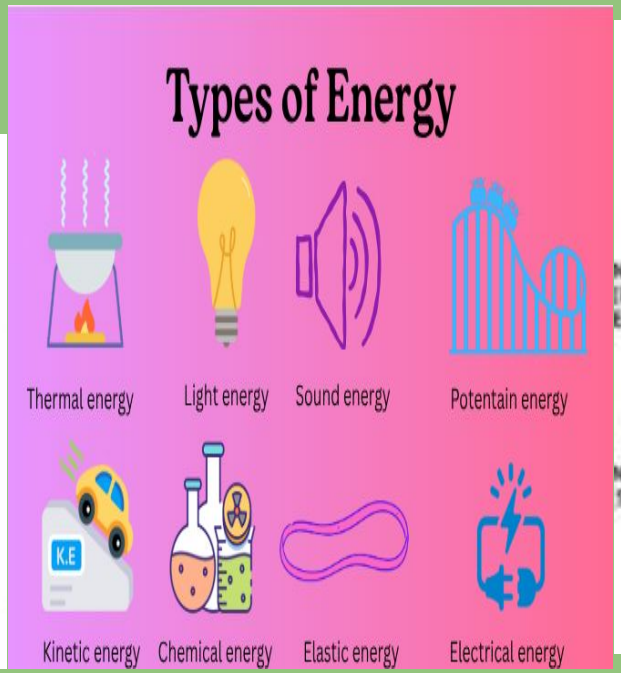
Made by canva.com

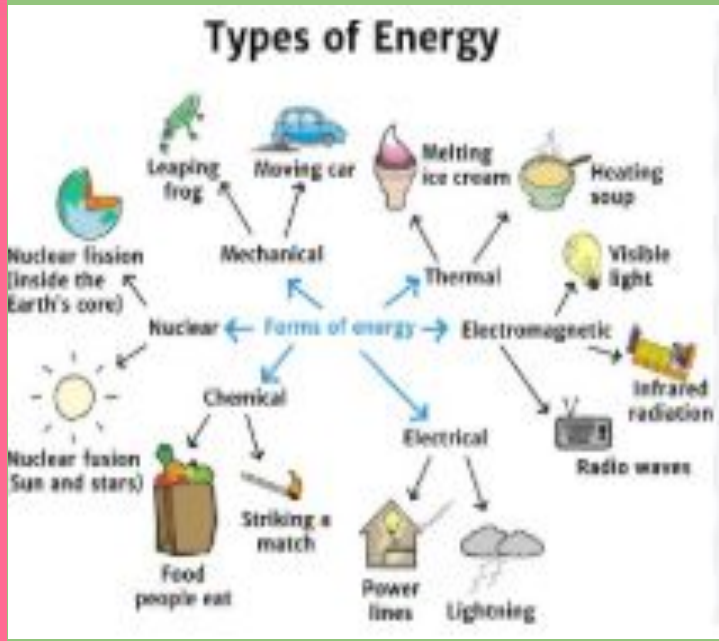


From solar schools

Inspire clean energy source







Harnessing Solar Energy: Power from the Sun

Source Department of energy.gov

Converting Light & Heat into Renewable Electricity.

- Captures solar radiation via photovoltaic cells.
- Utilizes the sun's intense light and heat energy.
- A clean, sustainable source for charging devices.
- Reduces reliance on fossil fuels.

Solar Farm at Sunset.

Sources: Department of Energy (energy.gov), Canva.com

Wind Turbine

Blade design: The blades are shaped like airplane wings. As wind flows over them, it creates a difference in air pressure, causing them to spin.

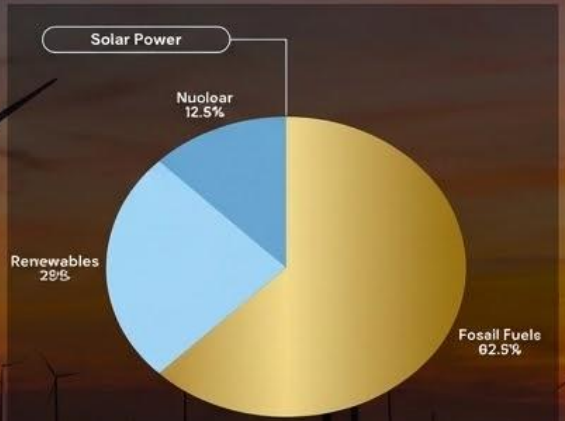
Shaft and gears: The spinning blades turn a large shaft, which is connected to a gearbox. The gearbox increases the rotational speed.

Generator: The high-speed shaft spins a generator to produce electricity.

Grid connection: Multiple turbines in a wind farm are connected to send electricity to the power grid through transmission and distribution lines.

Windmills have been modernized into wind turbines that generate electricity by using wind to spin blades, which in turn spins a shaft and gears that power a generator. This process converts the wind's kinetic energy into electrical energy, which is then sent to the power grid to be distributed to homes and businesses. Wind energy is a clean, renewable resource that is an increasingly important part of global energy supplies.

sources



Sources: Department of energy.gov, Bureau of land management.gov

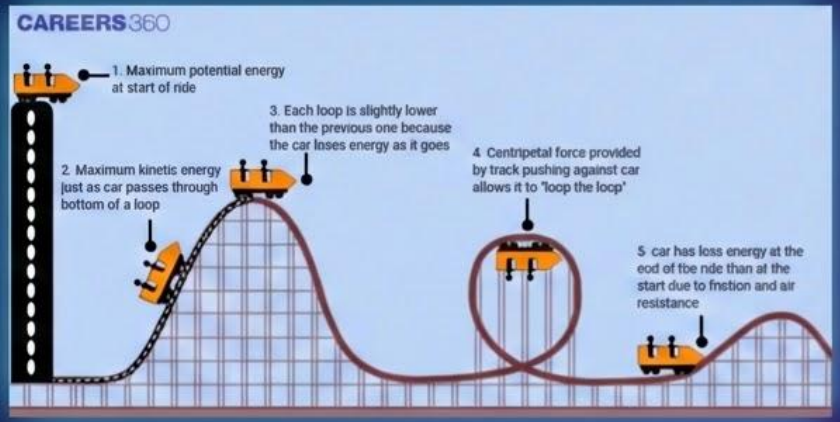
Light Energy

- A form of electromagnetic radiation.
- Consists of photons, produced when atoms heat up.
- Travels in waves.
- The only form of energy visible to the human eye.

Source : solar schools.com

Potential and Kinetic Energy

As the roller coaster is pulled up the first hill, it gains potential energy. This energy is then converted into kinetic energy as it speeds down, which is why the cars are fastest at the bottom of hills and slowest at the highest points.



-Teach Engineering

Thank you!

We appreciate you listening to our project idea. We can’t wait to explore and educate ourselves and others.