

# KINDS OF ENERGY



**ESP**

It's Science Time!

The background of the slide features a digital theme with binary code (0s and 1s) in shades of green and yellow, set against a backdrop of glowing light rays and a warm orange-to-yellow gradient.

## Introduction

Energy is important. It gives us light. It runs our cars and trains. Energy warms our homes. It cooks our food. It runs our computers and TVs. It helps us grow, move, and think. We use energy for everything.



## What is Energy?

Energy is the ability to do work. Energy comes in many forms. It can be:



Sound



Light

Heat



Electrical



Chemical



Mechanical



## Sound Energy

We can hear sound. Sounds are made when things move back and forth. This is called vibrating. Vibrations make sound waves. They move to your ear. Then, you can hear them. Sound waves move through many things. They move through gases. They move through solids. They move through liquids.



## Light Energy

Light is energy we see. The sun gives off light. Light bulbs and candles give off light. Light can go through some objects and not through others.



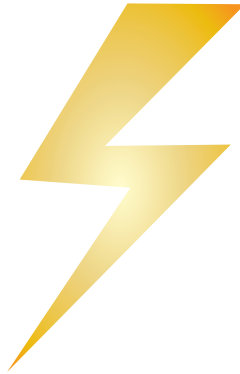
## ~~~~~ Heat Energy ~~~~~

Heat is energy we can feel. It makes our houses warm. We use it to cook food. Temperature measures heat energy. Heat energy always moves from warm to cool. Hold an ice cube. Heat will move from your hand to the ice. Your hand feels cold. The ice cube melts.



## ⚡ Electrical Energy ⚡

Electricity is the flow of electrical energy. We use it everyday. Electricity moves in wires. It can light a bulb. It makes the filament heat up. It glows.



## Chemical Energy

A chemical change makes chemical energy. This happens when things mix to form something new. When we use batteries, changes happen inside the battery. The change makes electricity.







## Mechanical Energy

Mechanical energy is motion. It moves parts of a machine. People use it to move, too. Mechanical energy puts a push or a pull on something else. This makes the object move. The wind moving windmill blades is an example.



## Changing Energy

Plants change light into chemical energy. They store it as food. They use the food to grow.



Animals cannot make food. They get energy from eating. They eat plants or animals. Your body uses the food you have eaten to live and grow.



A light bulb changes electrical energy to light and heat. A TV changes electrical energy into light and sound. A radio changes electrical energy to sound.




The background of the slide features a blurred image of binary code (0s and 1s) in shades of green and yellow, with bright light rays emanating from the right side, creating a sense of digital energy and motion.

## Conclusion

There is the same amount of energy today as when the world began. Energy cannot be made. It cannot be destroyed. It can only be changed into other forms.

**Electrical Circuits**  
Kinds of Energy

**Correlation**

<b>Fountas &amp; Pinnell</b>	<b>N</b>	
<b>DRA</b>	<b>30</b>	
<b>Estimated Lexile Measure</b>	<b>600</b>	

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