



# ELECTRICITY AT HOME



## What is Energy?

Energy is the ability to do work or to move or change matter. Energy is around us all the time and can take many different forms.

## Familiar forms of energy:

*Heat Energy:* Heat energy is a type of energy that occurs when heat is transferred among particles bouncing into one another in solids, liquids, and gases.

*Light Energy:* Light is a type of energy that makes it possible for us to see the world around us and keeps us warm. Light travels in photons, which are bundles of energy and contain the colors of the **rainbow**.

*Electrical Energy:* Electrical energy is created by the movement of electrons moving along a path in a conductor. All matter is made of atoms, which contains electrons that are always moving, when they move along a path, electricity is created.

## Forms of Energy



Light Energy  
(Radiant)



Energy of Motion  
(Kinetic Energy)



Heat (thermal)  
Energy



Electrical  
Energy



Nuclear Energy  
(Not at 5<sup>th</sup> grade)



Chemical Energy  
Food Energy



Potential Energy  
Stored energy



Sound Energy

More online energy activities:

[https://www.stemread.com/wp-content/games/solar-energy/story\\_html5.html](https://www.stemread.com/wp-content/games/solar-energy/story_html5.html)

Learn more about electrical energy:

Energy is everywhere! For example, a light bulb produces **light** from **electricity**. Light bulbs convert electricity into **light** and **heat**, the heat is considered waste. A light bulb that produces more light and less heat is more **efficient**.

*Efficient means operating or working in a way that gets results, with little wasted effort (like little wasted energy in the form of heat).*

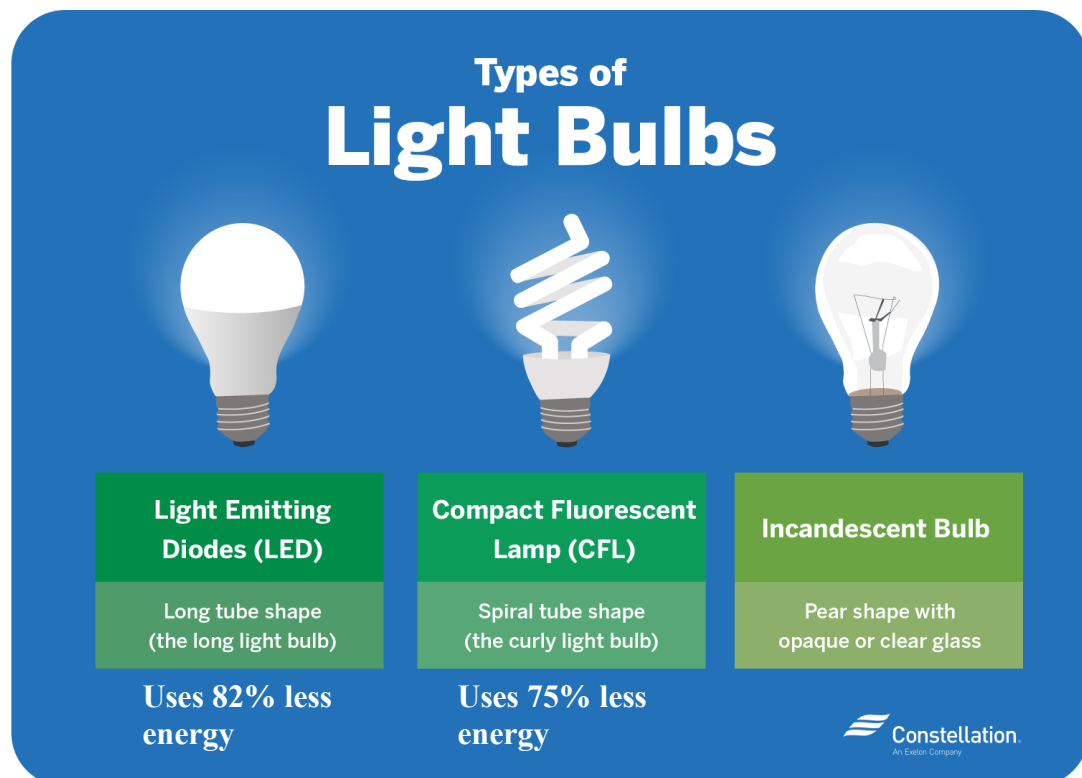
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Activity:

Go on an adventure and count how many light bulbs are in your home!

How many did you find? \_\_\_\_\_

BONUS: How many LED light bulbs are in your home? \_\_\_\_\_



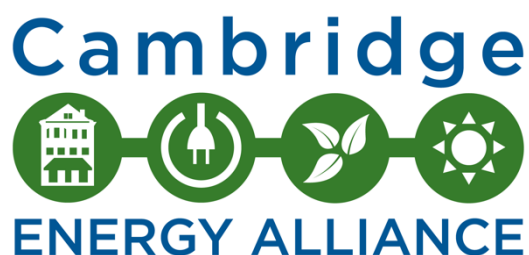
# PLAY ENERGY GAMES AND INTERACTIVE ONLINE ACTIVITIES:

visit

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This worksheet is made by:



Learn energy-saving tips for your home  
at [CambridgeEnergyAlliance.org](https://www.cambridgeenergyalliance.org)