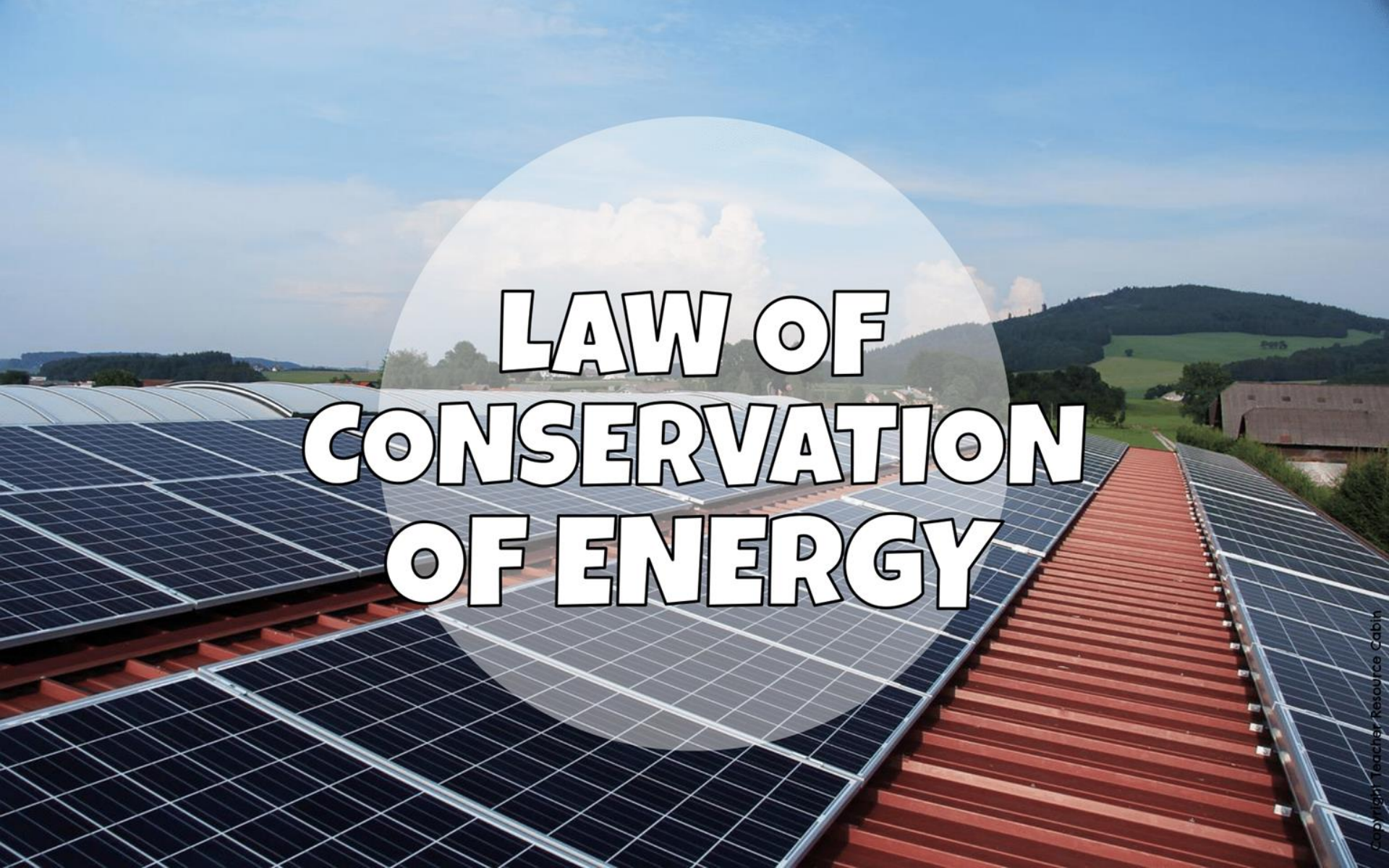
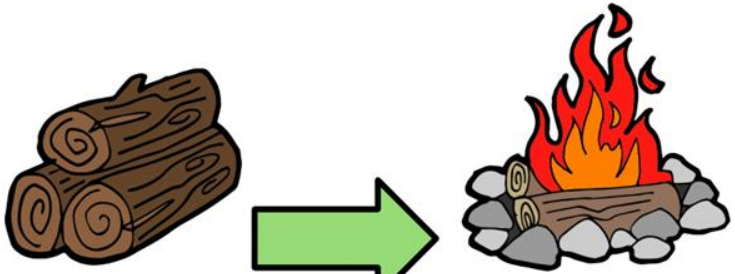


LAW OF CONSERVATION OF ENERGY

- The Law of Conservation of Energy states that energy can neither be created nor destroyed, only converted from one form of energy to another.



LAW OF CONSERVATION OF ENERGY

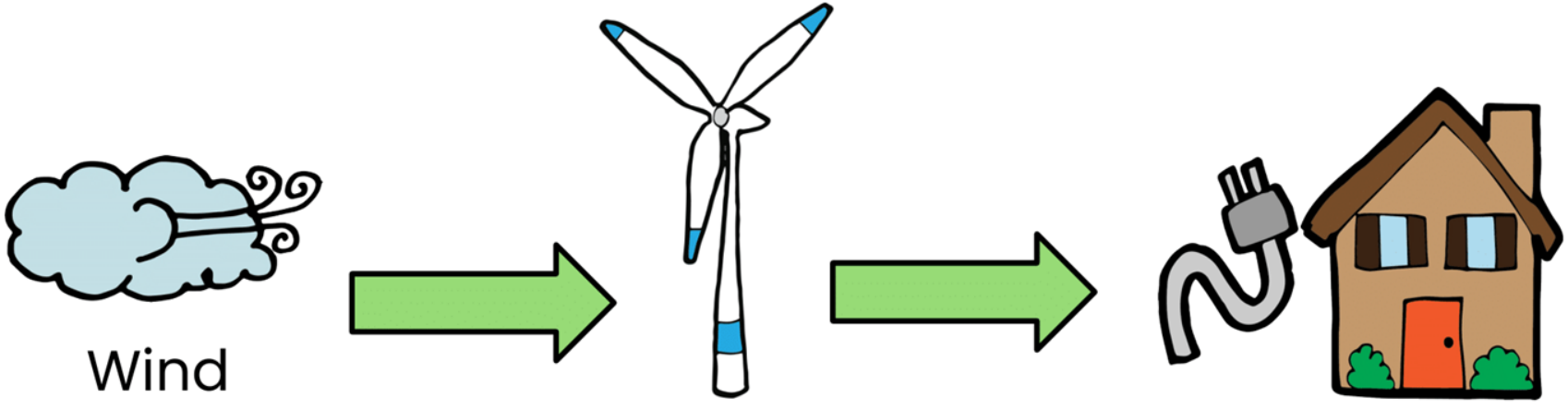
- Any given system will always have the same amount of energy, unless energy is added from another source.
- Energy can be transferred from one form to another.
    - When energy appears to be lost or used, it has actually just changed its form.

LAW OF CONSERVATION OF ENERGY

- To get electricity in your home, it must be converted and transferred from another source.
    - **Example sources:** Nuclear, solar, wind, coal, natural gas

Do you know the energy source for your house's electricity?

LAW OF CONSERVATION OF ENERGY



What is happening in this diagram?
How does it relate to the law of conservation of energy?

Think about it!

Look at the objects below. Determine what energy is involved in each conversion. The energy may be transformed into more than one type of energy.

Object	Input Energy (Start)	Output Energy (Transformation)
		
		
		
		

Think about it!

Explain how energy is transformed in each image shown below.

LAW OF CONSERVATION OF ENERGY

- Although energy cannot be destroyed, it can be wasted.

- Dissipation is a term used to describe ways in which energy is wasted.

How is energy wasted at your home or school?

LAW OF CONSERVATION OF ENERGY

DID YOU KNOW?

Fluorescent or LED light bulbs are more efficient than older light bulbs because they produce less heat!

Think about it!

What is energy dissipation?
Explain another example, different from what was discussed in class (e.g. older light bulbs).

Incandescent

Fluorescent