

S1 Lesson 2 (11/1 to 15/1)

Lesson	Learning Intentions - I can...	Information	Task
1	1. Name the 8 types of energy: potential (stored), sound, heat, atomic, chemical, kinetic (moving), light, and electrical.	What is Energy?	Information and questions on sheet 1. Fill in on Microsoft forms.
2	<ul style="list-style-type: none"> I will be able to state the Law of Conservation of Energy I will be able to identify energy changes in different examples 	Conservation of Energy	Information and questions on sheet 2
3	<ul style="list-style-type: none"> I can give examples of how not all Energy transferred is useful 	Waste Energy	Information and questions on sheet 3

1. Types of Energy

2. Conservation of Energy

As we saw in the last task, energy comes in lots of different types, but where does the energy come from?

All the energy had to come from another source. It is impossible for something to create energy from nothing it has to have been changed from another type. This is called conservation of energy

Energy cannot be created or destroyed, just changed into another form.

For example: A lightbulb doesn't produce light on its own. It only works when it is screwed into the socket.

This is because the socket allows electricity to flow through the bulb. This Electrical energy is transformed into Light energy and can be shown in this word equation.

Electrical Energy \longrightarrow Light Energy

(the arrow means changes to)

Here are some more examples of Energy changes:



In a gas fire:
Chemical energy (stored in gas) \longrightarrow heat energy + light energy



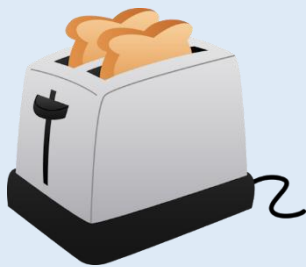
For a diver
stored energy (stored by climbing up to the diving board) \longrightarrow Kinetic energy (in the dive)



In an electric truck:
chemical energy (stored in battery) \longrightarrow electrical energy (in wires) \longrightarrow kinetic energy (from motor)

Questions: answer on word and upload Satchel one (SMHW).

Q1. Write the word equations for the energy changes that takes place in the following situations?



Toaster



Releasing a bow



Wind turbines

Q2. Can you think of an example where light energy is transformed into electrical energy?

Q4. Can you think of an example where chemical energy is transformed into kinetic energy?

Q3. Look at the cartoon below demonstrating energy changes.



What type of energy appears at stages A,B,C,D?