

S1 Lesson 1 (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. Answer 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 	Energy Changes	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

1) What is Energy?






‘Where do you get all that energy from?’ ‘Turn the light off to save energy!’ Have you ever heard someone make comments like this? It is quite likely as energy is something that you use all the time.





Even at this moment you are using energy to:

- keep your body working,
- Keep the building warm with the heating,
- Have the lights and the computer turned on,
- Power any form of Transport.

If there was no energy then nothing would happen at all! Energy can be defined as **the ability to do work (something)**.

Energy can be split into 8 different types:

Name	Type	Example of use
Heat Energy	Makes an object rise in temperature	An Oven 
Sound Energy	Vibrations (movements) in the air particles, to create sound	A conversation with your friend 
Kinetic (Movement) Energy	Energy of motion. If something is moving it has kinetic energy.	Going for a Run 
Electrical Energy	Energy in Electrical charges	Computer 
Atomic (nuclear) Energy	Energy Stored inside an atom	Nuclear power stations 

Light Energy	Waves of energy we detect as light	Light Bulbs	
Chemical Energy	Energy stored within a material that can be released	Food	
Potential (gravitational or mechanical) Energy	<p>(Gravitational) Energy stored from lifting things</p> <p>(Mechanical) Energy stored by stretching an object</p>	<ul style="list-style-type: none"> • Weightlifting • Elastic Band 	 

Questions:

Answer sheet link at the bottom of questions or complete on paper and send image on SMHW

1. Your Name
2. Class

List 2 more examples of each type of Energy.

3. Heat
4. Sound
5. Kinetic
6. Electrical
7. Atomic
8. Light
9. Chemical
10. Potential (Gravitational)
11. Potential (Mechanical)
12. What types of energy are in a stored form?

This is a picture of a bonfire night.



From the picture identify 2 examples of each of the following types of energy

13. Heat
14. Kinetic
15. Sound
16. Chemical
17. Light

Try to find out:

18. How is energy stored in a 'wind up watch'?
19. In football, commentators will often say players have 'potential' to play internationally. What do they mean? Can you relate this to potential energy?

Fill in your answers on the following link or through the QR code:

<https://forms.office.com/Pages/ResponsePage.aspx?id=oyzTzM4Wj0KVQTctawUZKWaeZ6bNSaRaj-TiK5FgW3lUMzRYUU9VNVIwRFdGVlZNNINRSURDMTNVTi4u>

