

Strand	Energy
Sub - Strand	Uses, advantages and disadvantages of the sources of energy
Learning Outcome	To enable students to learn the uses, advantages and disadvantages of the sources of energy.

Notes:

Source Of Energy	Uses	Advantages	Disadvantages
Sun (Solar)	<ul style="list-style-type: none"> - Lighting bulbs - Drying clothes - Heating water 	<ul style="list-style-type: none"> - Environmentally friendly. - Free and unlimited source of supply. 	<ul style="list-style-type: none"> - Expensive setup. - May not be suitable for cloudy conditions.
Water (Hydro)	<ul style="list-style-type: none"> - Powering electrical appliances - Lighting bulbs 	<ul style="list-style-type: none"> - Does not harm the environment - Free and unlimited source of supply. 	<ul style="list-style-type: none"> - May not be suitable during dry seasons. - High cost of electricity generation.
Wind	<ul style="list-style-type: none"> - Used in windmills. - Helps move sailing ships. 	<ul style="list-style-type: none"> - Does not harm the environment - Free and unlimited source of supply. 	<ul style="list-style-type: none"> - May not be suitable in calm conditions. - Electricity generation is limited.
Biomass	<ul style="list-style-type: none"> - Firewood for cooking. - Woodchips in boiler factories. 	<ul style="list-style-type: none"> - Abundance in supply. - Is less costly to use. 	<ul style="list-style-type: none"> - Reduces biodiversity. - Causes pollution.
Fossil Fuel (Petrol,Coal,Gas)	<ul style="list-style-type: none"> - Used to run automobiles. - Gas stoves. - To run generators 	<ul style="list-style-type: none"> - It is readily available in shops. - Can be stored for later use. 	<ul style="list-style-type: none"> - Causes pollution. - May run out of supply.

Activity:

1. What are the benefits of using renewable energy such as wind,sun,water and biomass?

2. List some ways in which you think fossil fuels have an advantage over renewable sources of energy?

3. Why should all countries promote the use of renewable energy?

Strand	Energy
Sub - Strand	Machines and Energy
Learning Outcome	To enable students identify the type of energy used to power certain tools, machinery and equipment.

ELECTRICITY AND HUMAN ENERGY

Many of the machines that we use every day work with electricity



Explanation and Notes: Energy plays a vital role in causing movements around us in our daily lives. Human energy is responsible for the operation of many machines, equipment's and tools which makes our work easier. Some of these machines also need energy such as electricity and fuel to function example torch, television, automobiles, phones, ships, fan, computers, refrigerators and washing machines etc. Movements of such machines and equipment's are therefore made possible as a result of both human energy and electricity.

Activity

State the type of energy used for the movement and function of the appliances, machines and equipment's shown below:

