W.s.56. Energy from chemical reactions. Name

Heat may be taken in or given out during a reaction. Sound, light, movement or electrical energy may also be produced. When fuels are burnt they give out heat and light energy. Explosive fuels give out movement and sound energy as well. The chemical reaction that takes place inside a torch battery gives out electrical energy.

Energy from fuels.









Wood can be burnt as a fuel.

Fossil fuels form over millions of years.

Burning of fuels makes carbon dioxide, water and heat energy:

FUEL + OXYGEN CARBON DIOXIDE + WATER +

The heat energy can be used to keep our houses warm and to cook food. It can also be changed into movement energy to drive engines.

Effects on the environment.

Burning fuels release carbon dioxide into the air. This stops heat escaping from the surface of the Earth back into space. This is called the GREENHOUSE EFFECT and it may lead to GLOBAL WARMING.

Oil and coal release sulphur dioxide gas when they burn. This gas goes into the air and dissolves in rain droplets to form ACID RAIN. In some parts of Europe acid rain has destroyed plant and animal life in lakes and forests. Acid rain also causes corrosion of buildings and statues.

Exercise - Complete the sentences below.

- 1) Different types of $E _ _ _ _$ can be produced by chemical reactions.
- 2) When fuels are burnt they give out heat and L_{--} energy.
- 3) The reaction inside a battery produces E _ _ _ _ energy.
- 4) Extra carbon dioxide gas in the air may lead to $G _____$ warming.
- 5) Burning of oil and $C _ _$ releases sulphur dioxide gas.
- 6) Sulphur dioxide gas forms A _ _ _ rain