



Coal

Introduction

Coal is a fossil fuel that we use as a source of energy. It is a black or brownish-black rock that burns easily and has been used for centuries for cooking, heating, electricity, and industrial work.

How is Coal Formed?

Coal is formed from dead plants that got buried deep under the Earth millions of years ago.

Process of Coal Formation:





- i. Dead plants in swamps got buried under soil.
- ii. Over millions of years, heat and pressure turned them into peat and then into coal.
- iii. This slow process is called carbonisation.

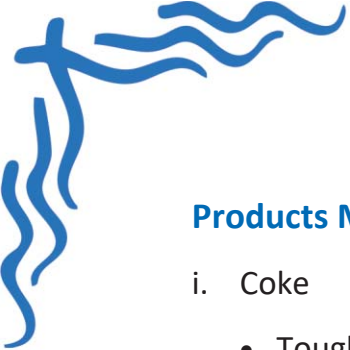
Coal is a fossil fuel because it comes from ancient plant remains.

Types of Coal:

Type of Coal	Carbon Content	Use
Peat	Least carbon	Starting stage of coal
Lignite	Low carbon	Used for electricity
Bituminous	High carbon	Used in industries, power plants
Anthracite	Highest carbon	Burns with little smoke

Uses of Coal:

-  Fuel for cooking and heating
-  Electricity production in thermal power plants
-  Used in industries (iron, steel)
-  Used to make coal gas and coke



Products Made from Coal:

- i. Coke
 - Tough, black material used in steel manufacturing
 - Almost pure carbon
- ii. Coal Tar
 - Thick black liquid
 - Used to make dyes, paints, perfumes, plastics, medicines
- iii. Coal Gas
 - Used as a fuel

Disadvantages of Coal:

- Causes air pollution
- Produces smoke and harmful gases like CO₂
- Coal mining can harm the environment and health

Quick Recap:

Point	Details
What is Coal?	Fossil fuel formed from dead plants
Formation process	Carbonisation (millions of years)
Main uses	Fuel, electricity, industrial use
By-products	Coke, coal tar, coal gas
Harmful effects	Pollution, smoke, environmental damage