

Coal And Petroleum Class 8 Notes

Natural Resources and its Types

Before digging deeper into the meaning and usage of coal and petroleum, let us first try to understand the meaning of natural resources in this blog on Coal and Petroleum class 8 notes. Natural resources are classified as resources derived from nature, according to Chapter 8 of Coal and Petroleum Class 8. As per the chapter of Coal and Petroleum Class 8, there are 2 types of natural resources that are present namely:

- Inexhaustible Natural Resources
- Exhaustible Natural Resources

Inexhaustible VS Exhaustible Natural Resources

Let us take this blog on Coal and Petroleum class 8 notes one step further by understanding the different types of natural resources that we have mentioned above. According to the chapter of Coal and Petroleum Class 8 Science, inexhaustible natural resources are those that are abundant in nature and will not be exhausted even after extensive use. Sunlight, water, wind, and other natural phenomena are examples. On the other hand, exhaustible natural resources are those that are found in small amounts in nature and would be exhausted if used continuously. Forests, coal, natural gas, and other resources are examples.

What are Fossil Fuels

Now it is time to understand some of the different types of exhaustible natural resources which are collectively known as fossil fuels. As per the chapter of Coal and Petroleum class 8, coal, petroleum, and other non-renewable natural resources are made from the dead remains of living organisms. Fossil fuels are the name for these types of energy that mankind uses. The different types of fossil fuels are as follows:

- Coal
- Petroleum

- Natural gas

Coal

There were trees and dense forests on the planet 300 million years ago. These trees were buried in the soil as a result of natural disasters such as floods. Over time, layers of soil were deposited on top of them, compressing them. They were converted to coal, which is hard like stone substance that is black in colour due to the high pressure and temperature over this buried forest. Since ancient times, coal has been used as a heat source to cook food, to create steam to run trains and other engines, and in thermal power plants to generate electricity, among other things.

The By-Products of Coal

Some of the products that are obtained through or from coal are mentioned below in the table.

Products of Coal	Description	Application
Coke	It has a hard, brittle texture and a dark tint. It is carbon in its purest form.	Its use and application can be seen in steel production, metal extraction, and so on.

Coal Tar	<p>It's a thick, black liquid with a foul odour.</p> <p>It's made up of about 200 different compounds</p> <p>or substances.</p>	<p>Coal tar by-products are used to make synthetic dyes, medicines, explosives, and perfumes, among other things. Coal tar is also used to make naphthalene balls, which are used to repel moths and other insects.</p>
----------	---	---

Coal Gas	<p>Most of you are probably unaware that coal</p> <p>gas is generated when coal is processed to produce coke. For the first time, coal gas was used for street lighting in London in 1810, and in New York during 1820. It is now used as a heat source rather than a light source.</p>	<p>Coal gas is primarily used as a source</p> <p>of energy in a variety of industries.</p>
----------	---	--

Concept of Carbonisation

Let us now understand a very interesting topic of carbonisation in our blog on Coal and Petroleum class 8 notes. As per the chapter of Coal and Petroleum class 8, carbonisation is the method of turning dead plants or vegetation into coal. It has been discovered that coal is primarily fluorescent which, when burned in the air atmosphere, emits carbon dioxide gas.

Petroleum

After understanding in detail what is coal, the process of carbonisation and knowing about the different by-products of coal and its application, let us take our roller coaster ride of this blog on coal and petroleum class 8 notes to our next stop which is petroleum. Do you know that in the past, the oceans were home to a wide variety of species? When these species died, their corpses settled at the bottom of the sea, gradually being covered by layers of sand and clay. The absence of air, temperature, and pressure transformed them into petroleum after millions and millions of years. Petroleum is a foul-smelling dark oily liquid. Petroleum gas, petrol, gasoline, lubricating oil, paraffin wax, and other constituents are all derived from petroleum.

Refining of Petroleum

In a petroleum refinery, the method of extracting the different constituents of petroleum is called refining. The process of the refining of petroleum can be explained via the help of the following picture or diagram shown below.

Petroleum Conservation Research Association suggests several fuel-saving initiatives and some of them are listed below:

- Maintain a steady and average speed in your car.
- Make sure the tyre pressure is right.
- Maintain the condition of your car at all times.
- When not in service, switching off the vehicle's engines.

By-Products of Petroleum

In our blog on Coal and Petroleum class 8 notes, we will also be telling you the different components or by-products of petroleum along with its uses.

Constituents of petroleum

Uses

Kerosene

Used as fuel in stoves, lamps and more.

Liquefied Petroleum Gas (LPG)

Used a common fuel for home and industries as well.

Petrol

Used as fuel for automobiles and as a solvent for dry cleaning as well.

Bitumen

Used in the making of paints, etc.

Lubricating Oil

For lubrication

Paraffin Wax

Used in ointments, candles, etc.

Diesel

Used for heavy motor vehicles and generators as fuel.

Natural Gas

In this blog on Coal and Petroleum class 8 notes, our last destination in the list of exhaustible natural resources is of natural gas. Natural gas is another important fossil fuel that can be easily transported via pipes as it is available in the form of gas. Natural gas can be found in the parts of Tripura, Rajasthan, Maharashtra, and the Krishna Godavari delta in our region.

CNG or Compressed Natural Gas

CNG refers to natural gas that has been processed under high pressure. It pollutes the atmosphere less. Furthermore, since it is easily transported via pipes, it can be used directly in homes and factories for burning and other purposes. Some of the uses and applications of the CNG is listed down below:

- Automobiles use it as a source of fuel.
- It is used as a raw material in the manufacturing and production of a number of chemicals and fertilisers.
- CNG is currently supplied through a vast network of pipelines in Vadodara and some parts of Delhi.