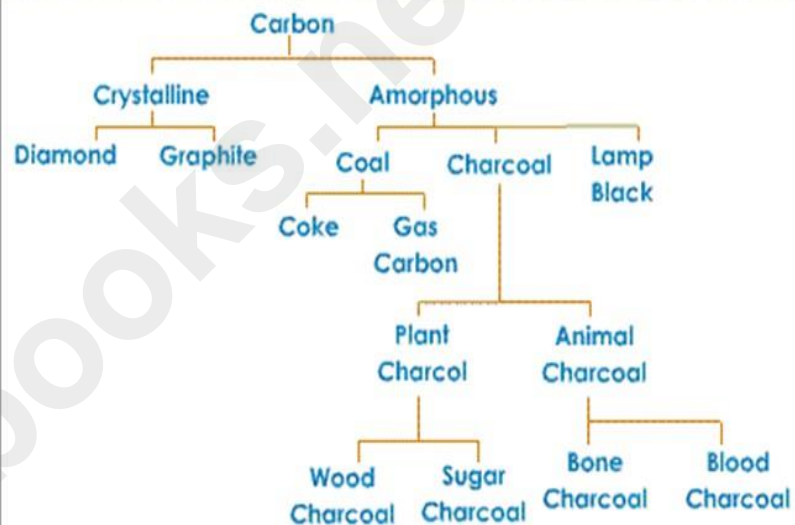
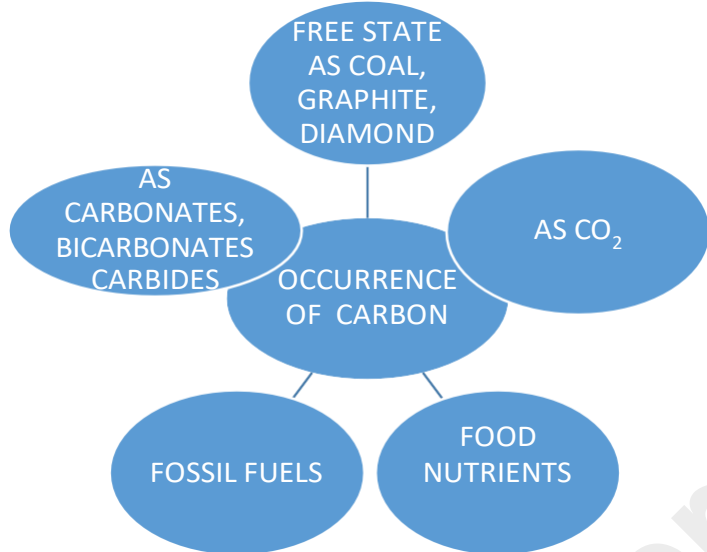
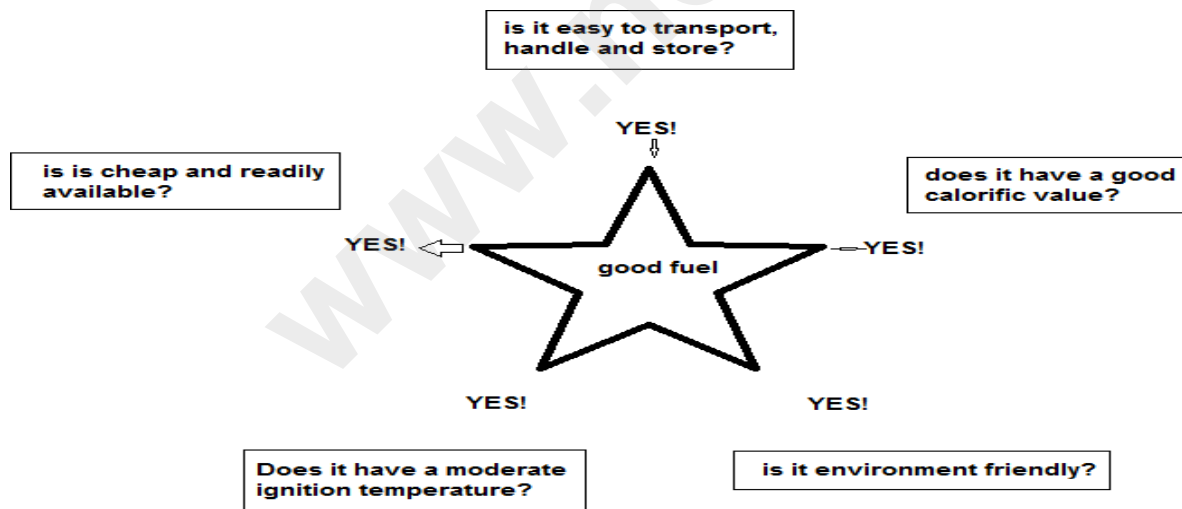


ICSE CLASS 8 CHEMISTRY REVISION NOTES ' CARBON AND ITS COMPOUNDS



Allotropy is the phenomenon where an element exists in two or more forms with identical chemical properties but different physical properties



Fuels: Substances that burn in air to produce heat and light energy

Combustion:
A chemical process in which substances combine with oxygen to produce a large amount of energy in the form of heat and light

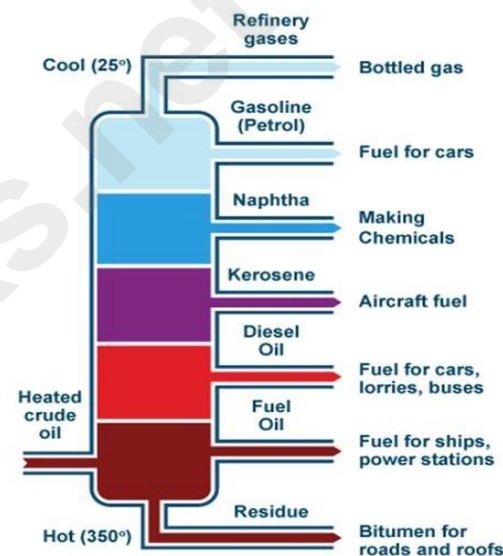
3 conditions needed:

- Combustible substance
- Supporter of combustion
- Ignition temperature

Primary fuels:
Coal, wood, natural gas- obtained directly from nature

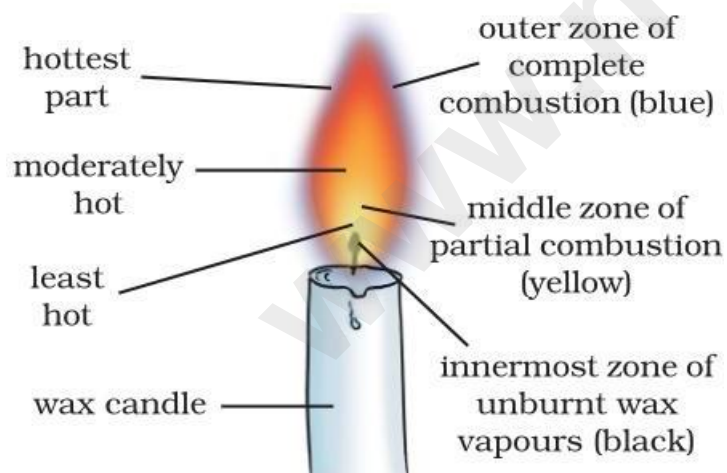
Secondary fuels:
Coke, kerosene, water gas- derived from natural fuels

Fossil fuels: Coal, petroleum, natural gas. They are the result of the decomposition of dead plant and animal matter buried deep in the Earth's crust.



Petroleum and its products

Flame



Fire extinguishers:
Devices in which carbon dioxide is produced in different forms for use as extinguishing agents to put off the flame

- Soda acid fire extinguisher
- Foam based extinguisher
- Liquid carbon dioxide extinguisher

Carbon monoxide:
When there is incomplete burning, CO is produced. CO combines with haemoglobin to form carboxyl haemoglobin. This prevents Hb from carrying oxygen thus causing deprivation of oxygen to body cells. CO is highly poisonous and can cause death.

CO is a reducing agent:

$$\text{CuO} + \text{CO} \rightarrow \text{Cu} + \text{CO}_2$$

$$\text{PbO} + \text{CO} \rightarrow \text{Pb} + \text{CO}_2$$

$$\text{Fe}_2\text{O}_3 + 3\text{C} \rightarrow 2\text{Fe} + 3\text{CO}_2$$