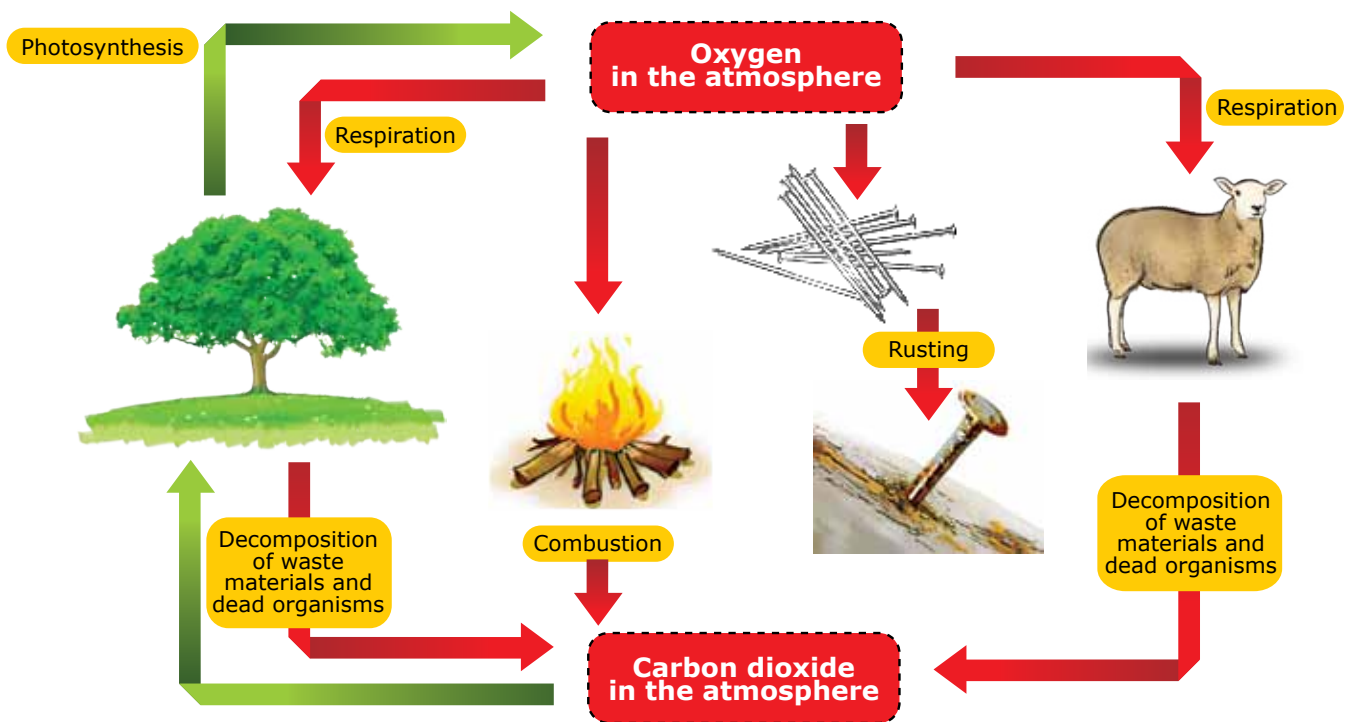
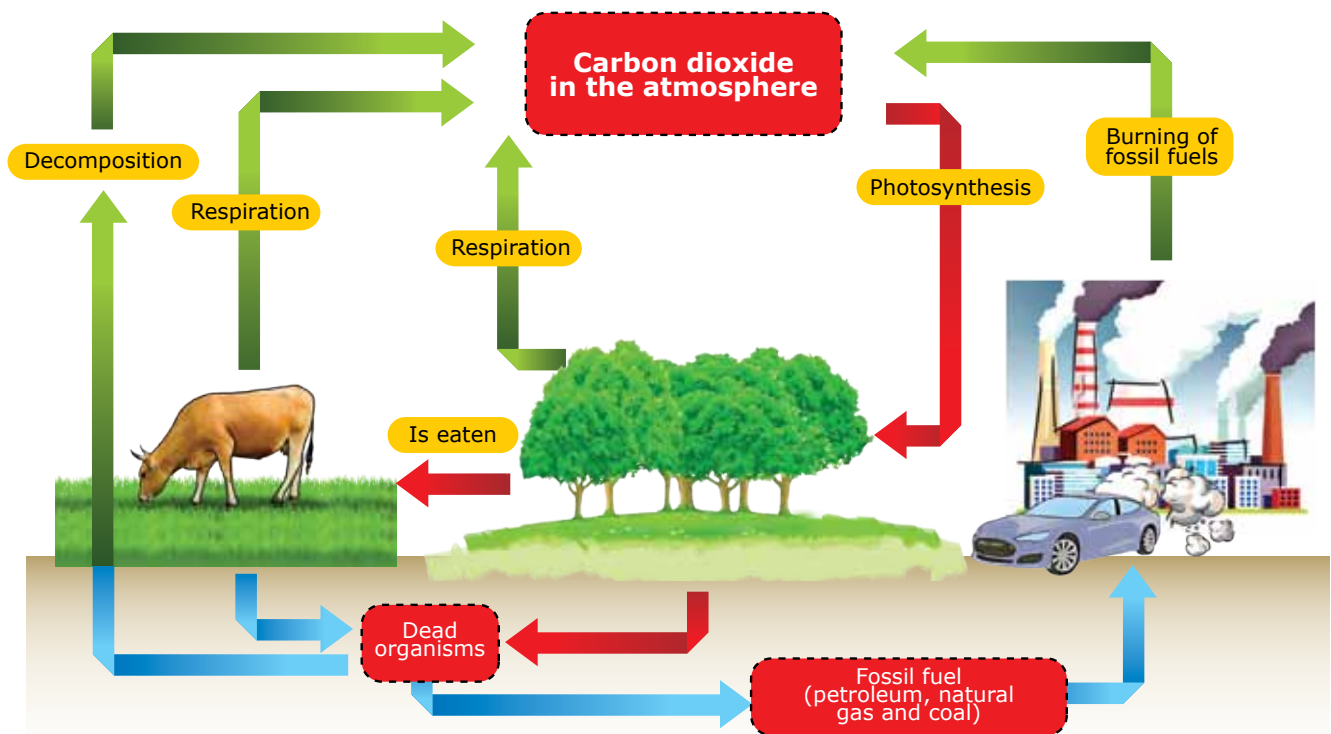


Oxygen cycle



Carbon cycle



Combustion

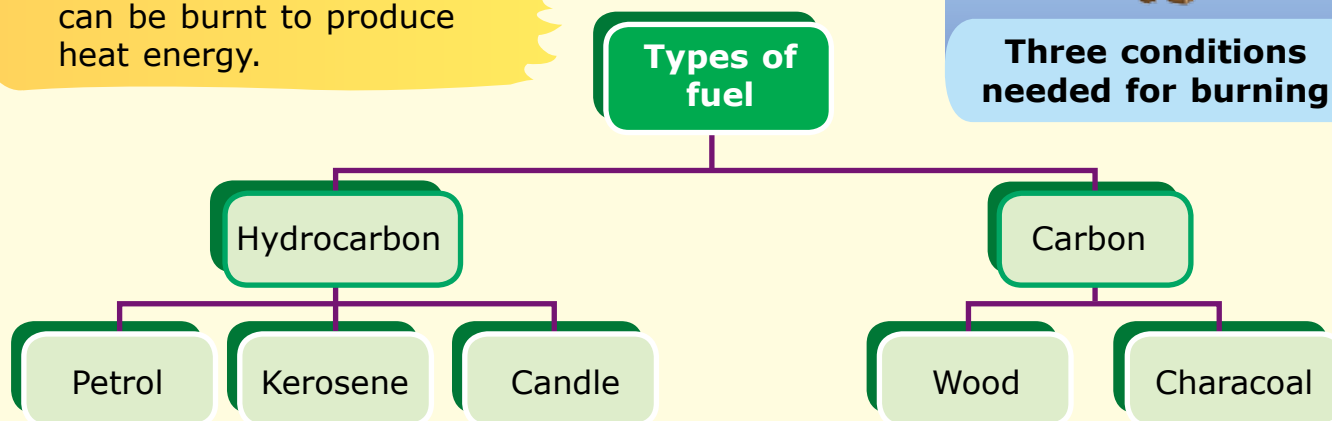
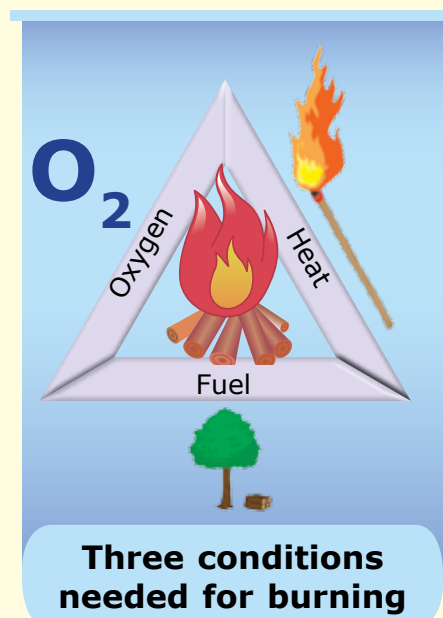
Definition:

A reaction that occurs when a substance is heated in the presence of oxygen which produce heat and light energy.

Condition for combustion to take place:

Combustion can only take place with the presence of oxygen, heat and fuel simultaneously.

- **Fuel** is a substance that can be burnt to produce heat energy.



The smoke released from the exhaust of a vehicle appears white because it contains saturated water vapour.



Reaction:

Hydrocarbon + Oxygen $\rightarrow$ Heat + Light + Carbon dioxide + Water vapour



Black smoke released from a fire shows high carbon content in the fuel.

Reaction:

Carbon fuel + Oxygen $\rightarrow$ Heat + Light + Carbon dioxide