

11. June, 2021

Heat

Sea breeze

- Day time
- Direction of wind/breeze
Sea to land
- Low pressure - Land
High pressure - Sea

Land breeze

- Night
- Direction of wind
Land to sea
- Low pressure - Sea surface
High pressure - Land

Forced convection: It is the mode of heat transfer in which motion of fluid is generated by external sources like fan, blower, pump, etc.

eg. 1) Computer uses fan to keep electronic components from getting hot.

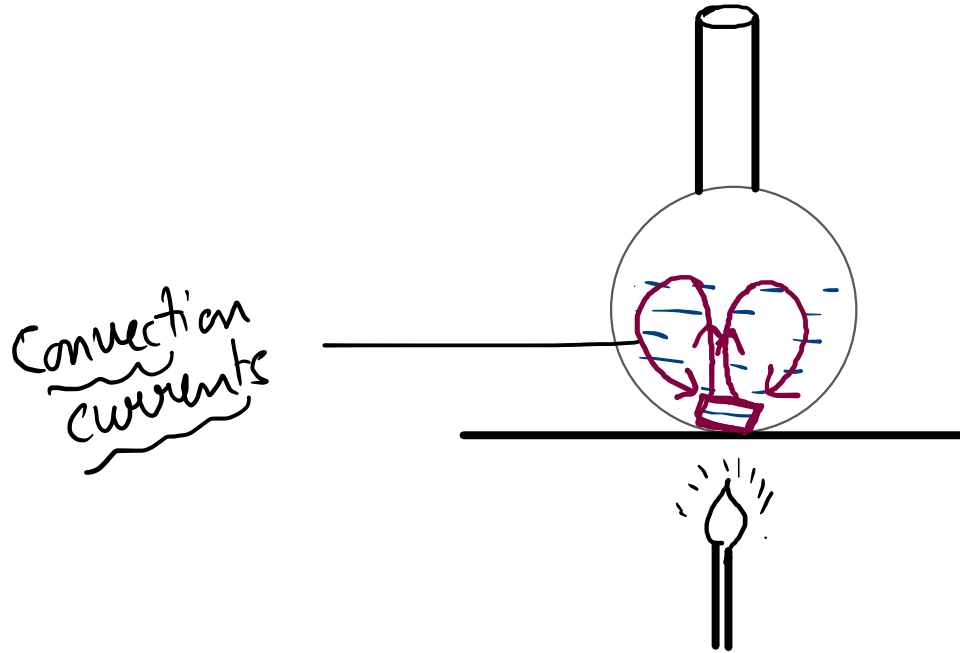
2) Central heating system, central cooling system and air conditioning.

3) Heaters, coolers, etc.

4) Blowers used for room heating at home.

Active physics:

To show convection current
Potassium permanganate (purple in colour)



3) Radiation: It is the process of heat transfer in the form of waves and in this process no material medium is required.

→ The waves which carry heat energy from sun to earth are called Heat waves, infrared waves, thermal radiations and electromagnetic waves.

★ All objects emit and absorb radiation

Eg. 1) when you sit near a fireplace, you feel warmth due to radiations.

2) when you sit near room heater, you feel warmth due to radiations.

→ Black surfaces absorb more heat.
eg. Black coal tar road gets very hot in summer.

→ Silver colour reflects more heat.
eg. Petrol storage tanks are painted silver colour
to reflect heat radiations.

Homework

Ex-2. VSA $\phi 13, \phi 14, \phi 15$ } Foundation
 SA $\phi 10, \phi 12$ } module
 LA $\phi 5$ } Pg 23