

DATE: 21 SEP 2020

SUBJECT : SCIENCE

CHAPTER-7:

TEMPERATURE AND HEAT

TOPIC-6:

SEA BREEZE AND LAND BREEZE

SEA BREEZE AND LAND BREEZE

Sea breeze and land breeze:

Sea Breeze: Blowing of cool air from sea to land in coastal area during the day time is called sea breeze.

Land Breeze: Blowing of cool air from land to sea in coastal area during the night time is called Land breeze.

Causes of sea and land breeze:

Causes of sea breeze: In coastal area at day time land gets heated faster than sea water as the heat capacity of land is low and heat capacity of water is high. Thus the temperature of air on land is higher than that of sea. So a pressure difference is developed between air on land and air on sea. Hence hot air above land rises up and the cool air above the sea moves towards the land and takes its place. This causes sea breeze to blow.

Causes of land breeze: At night in coastal area, the land cools faster than the sea as the heat capacity of land is low and heat capacity of water is high. Thus the temperature of air on sea is higher than that of land Hence the warm air above the sea rises up and the cooler air from above the land moves towards the sea. This causes a land breeze to blow.

Practical application of convection: working of air conditioner and room heater- convection process used.

NOTE: Sea breeze and land breeze help to maintain a moderate climate along coasts.

Sea Breeze



Land Breeze



DIFFERENCES BETWEEN SEA BREEZE AND LAND BREEZE

SEA BREEZE	LAND BREEZE
1. It occurs at day time	1 it occurs at night
2. It is stronger	2. It is weaker
3. Sea breeze has moisture	3. Land breeze are dry wind
4. During sea breeze there is high temperature difference between sea and land	4. During land breeze there is low temperature difference between sea and land
5. It is the wind blowing from sea to land at day time	5. It is the wind blowing from land to sea by night.

QUESTIONS: HOME ASSIGNMENT

1. What is sea breeze? Explain the cause of sea breeze
2. What is land breeze? Explain the cause of land breeze.
3. Where do sea breeze and land breeze found to be occurred?
4. Which one is stronger sea breeze or land breeze?
5. Differentiate between sea breeze and land breeze
6. Why does sea breeze blow during day time ?