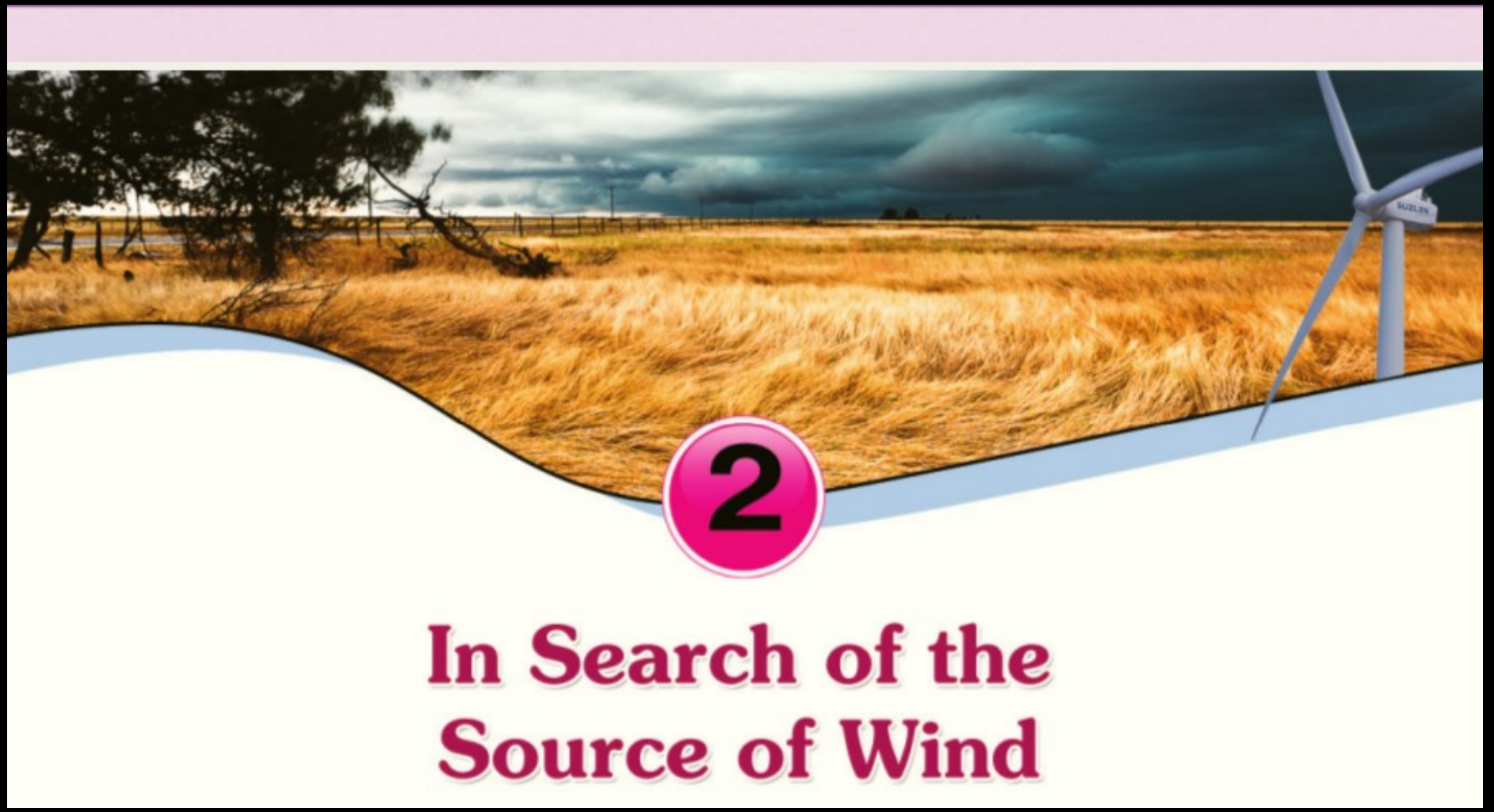
CLASS -4



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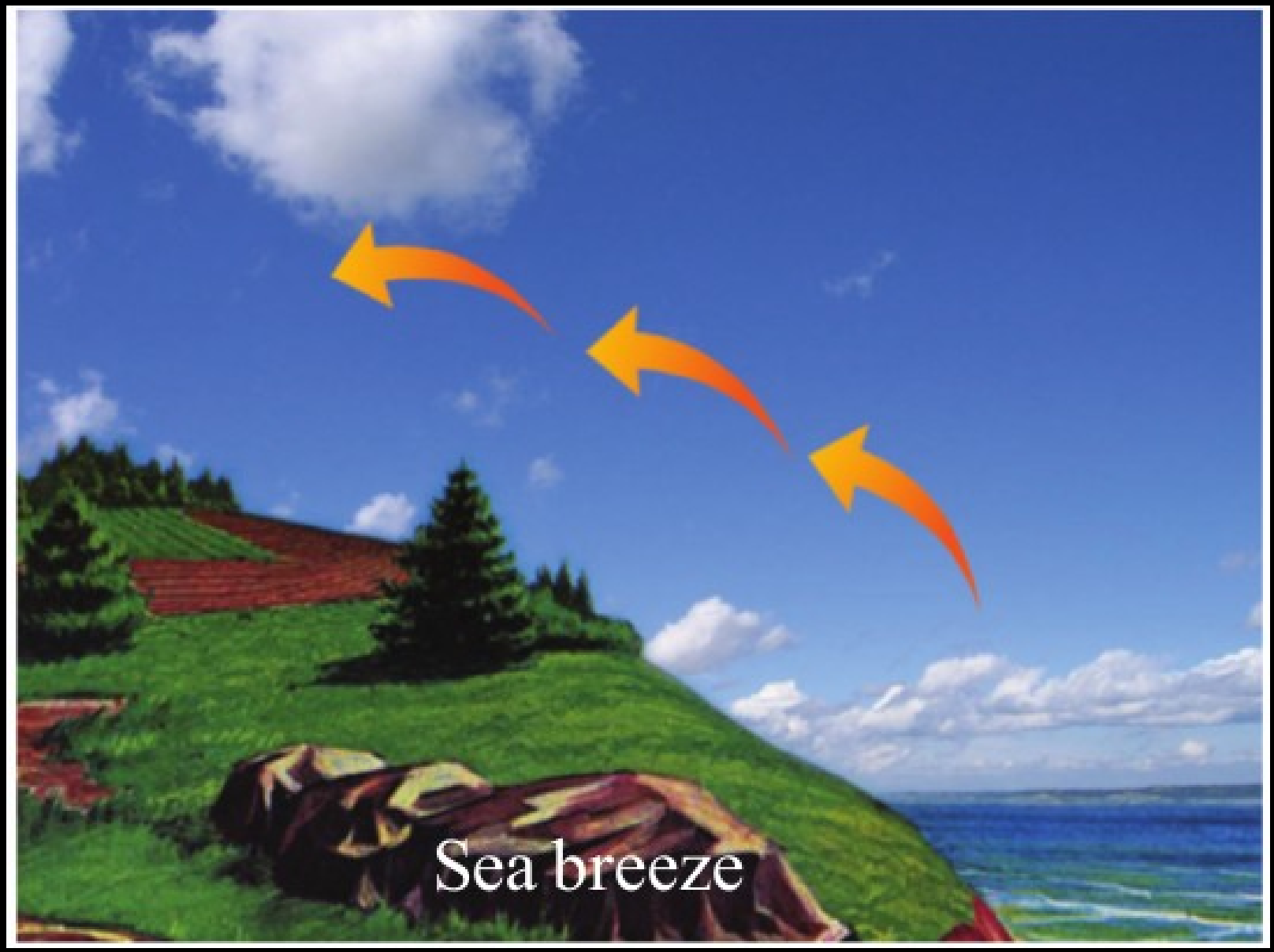
PLAY



Sea breeze

-The air in contact with the land gets heated up and ascends as the land heats up quickly during the daytime.
-This leads to the formation of low pressure over the land.
-which causes the comparatively cooler air blow from the sea to land.
-This is known as sea breeze.

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Land breeze.

-As the land cools faster than the sea during the night it would be high pressure over the land and low pressure over the sea.
-This results in the movement of air from the land to sea.

-This is the land breeze.
-The land breeze which starts blowing at night becomes active early in the morning and ceases by sunrise.

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Mountain and valley breeze

Valley breeze

-During the day time the air above the mountains gets heated and rises up.

-As a result, the wind blows up slope from the valley with relatively lower temperature.

-This is known as valley breeze.

Mountain breeze

-During night the air in the mountainous regions cools due to the intense cold conditions in that region.

-As cool air is dense, it blows towards the valley.

-This is known as mountain breeze.

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Local winds

-Local winds are winds whose effects are limited to a relatively smaller area.
-Formed as a result of the local pressure= differences, these winds are weak.

-Such winds exist in different parts of the world in different names.
-Loo, Mangoshowers, Kalbaisakhi, Chinook, Harmattan and Foehn are some of the local winds in the world.

Chinook

PLAY

-Chinook is a hot local wind that blows down the eastern slope of the Rocky Mountains in North America.

-As a result of this wind, the ice on the eastern slope of the Rocky Mountains has been melts down.

-Therefore, it is called Chinook, which means 'Who Eats Snow'.

-Since this wind reduces the severity of the cold, it is helpful for wheat cultivation in the Canadian lowlands.

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Foehn

PLAY

-Foehn is the wind that blows down the northern slopes of the Alps mountain.

-As the air heats up due to pressure from the descent, it helps in reducing the severity of cold in that region.

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Harmattan

-Harmattan is a dry wind which blows from the Sahara desert towards West Africa.

-On the arrival of these winds, the humid and sultry conditions of West Africa improve significantly.

-Hence, people call these winds as the doctor.

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PLAY

Loo

-Loo is a hot wind blowing in the North Indian plain.

-These winds blowing from the Rajasthan desert raise the summer temperature of the North Indian plains.

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Mango showers

-The winds that blow in South India during summer season are called Mango showers.

-These wind cause the ripening and fall of mangoes and hence the name.

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Variable winds

-Variable winds are winds with entirely different characteristics formed during certain atmospheric situations.

-Cyclones and anticyclones are variable winds.

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Cyclones

PLAY

-Cyclones are caused by the formation of low Atmospheric pressure at the centre surrounded by high pressure regions.

-Strong whirl winds blow towards such low pressure centres from the surrounding high pressure areas.

-Due to Coriolis effect cyclones are flow in the anti-Clock wise direction in the Northern Hemisphere.

-in the southern Hemisphere direction of cyclones are clock wise.

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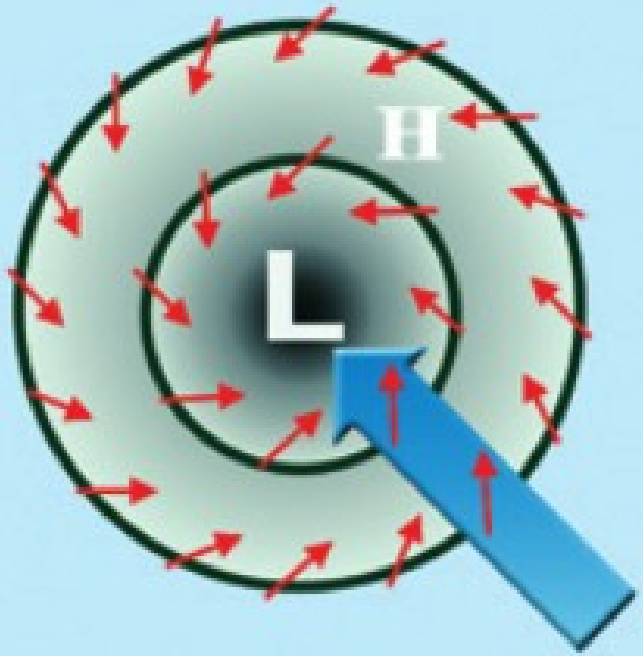
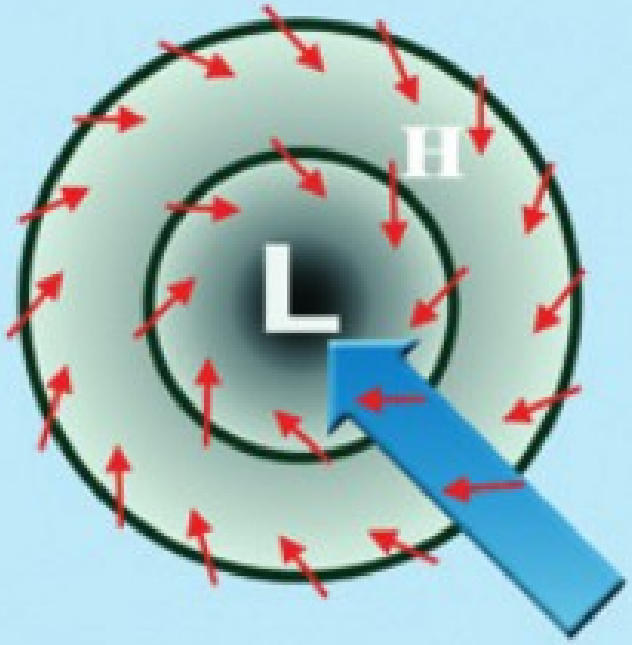
Cyclones



Anti clockwise
(Northern Hemisphere)



Clockwise
(Southern Hemisphere)

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-Based on the climatic region of their formation, cyclones can be classified as tropical cyclones and temperate cyclone.

-The Ockhi - cyloninc winds that struck the coastlines of Kerala and Lakshdweep during November 2017 was a tropical cyclone

-Tropical cylones are caused due to local pressure differences in the tropical oceans, especially the Indian ocean.

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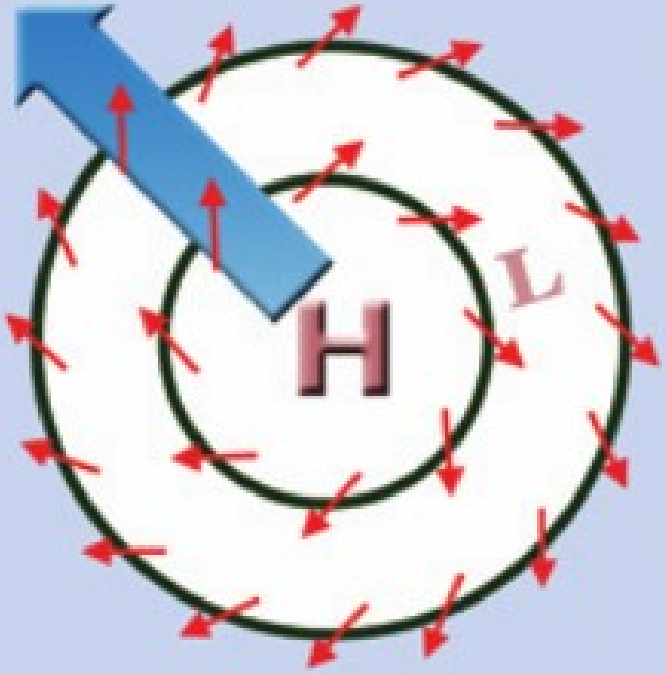
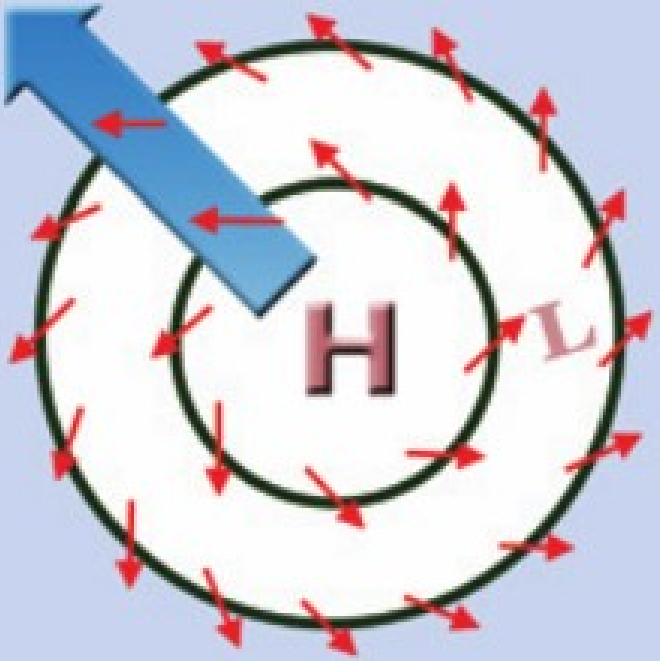
Anti Cyclones



Clockwise
(Northern Hemisphere)



Anti clockwise
(Southern Hemisphere)

Anti cyclones

-Anti cyclones are phenomenon where strong whirl winds blow from the high pressure centres to the surrounding low pressure areas.
-Due to Coriolis effect the pattern of winds in anti cyclones is clock wise in the Northern Hemisphere and anti clockwise in the Southern Hemisphere.

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ALL THE BEST

By

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