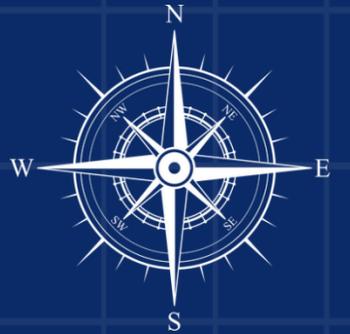




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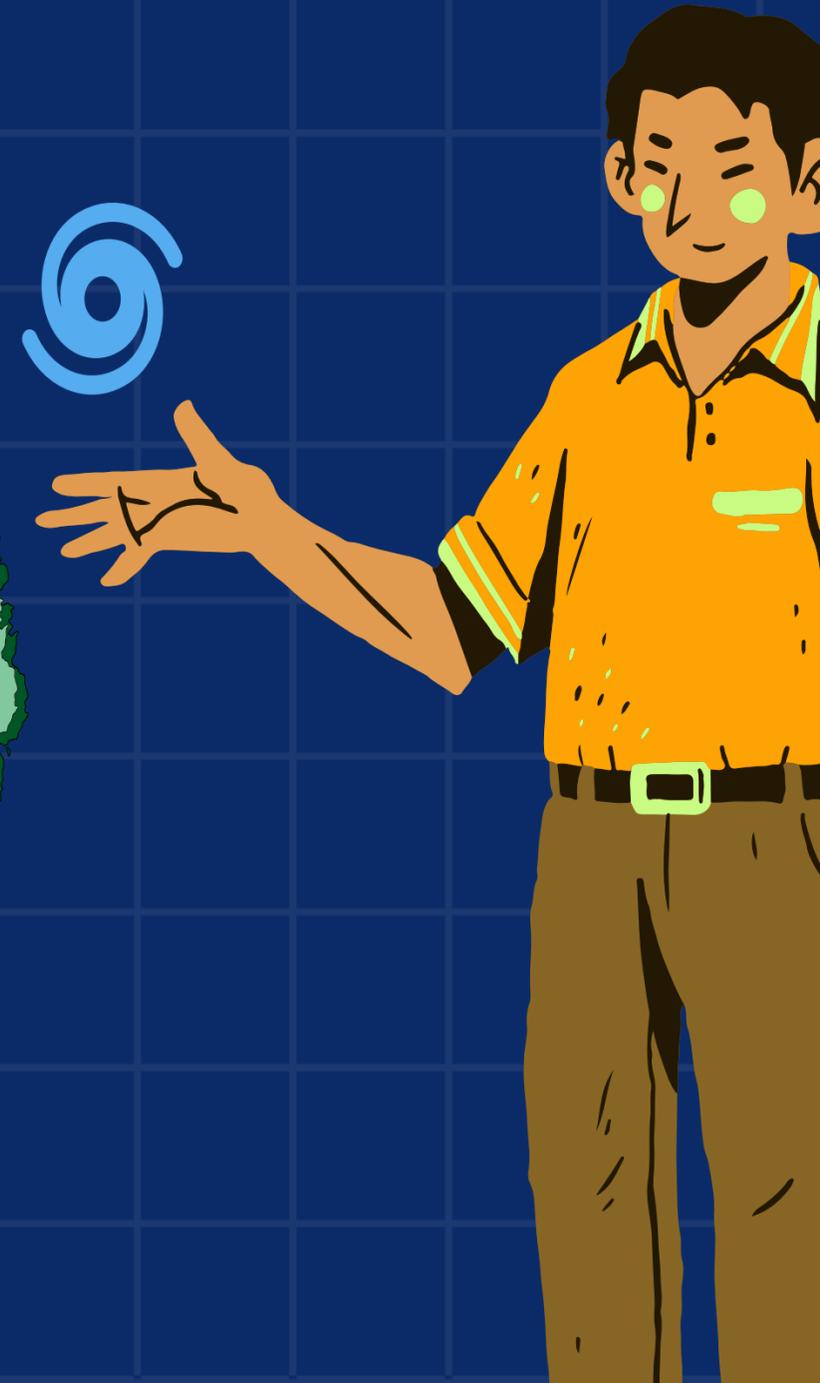
WEATHER  
DISTURBANCES





Look at the sky. Can you tell what the weather is? Weather is the condition of the atmosphere at a short period of time . The different factors that affect the weather include air temperature, air pressure, humidity, clouds, precipitation , and wind speed and direction. When these factors change and affect the condition of the atmosphere, weather disturbances may occur.

Weather disturbances refer to any disruption of the atmosphere's stable condition. It can manifest through the formation of a low pressure area or different prevailing winds like monsoons and the Inter tropical Convergence Zone or ITCZ.



## Low Pressure Area(LPA) and High Pressure Area(HPA)

This refers on the weight of the air that is pressing down on earth. An abrupt change in air pressure can trigger weather disturbances . Convection , or the rising of warm air and sinking of cold air, explains of how a high pressure area are formed.

## Low Pressure Area(LPA) and High Pressure Area(HPA)

When cold air sinks, it results to a high pressure area. Since most of the air is pressing down , the air in the surface becomes dry. Formation of a high pressure area indicates fair weather , fewer clouds are found on the sky.

But when warm air rises, less air presses downward, resulting in the formation of a low pressure area. As the air continuously rises, it will eventually condense, and form clouds. The formation of a low pressure area indicates the possibility of rain there is a higher chance of rain when more clouds are formed.

An LPA can result to weather disturbances, rains and strong winds are brought about by low pressure.

**Tropical cyclone** – when cyclone is formed over the tropics

The classification of tropical cyclones according to strength of winds are as follows.

## Tropical Disturbance

It is an isolated weather system with an apparent circulation. It is characterized by a poorly developed wind circulation. This is commonly observed throughout the wet tropics and subtropics.

# Tropical Depression

It is a weak low pressure disturbance with a definite surface circulation. It has a maximum wind speed up to 61 kilometers per hour (kph). It is the most common in the equatorial region or the inter tropical convergence zone(ITCZ). The ITCZ is the belt of low pressure which circles the earth generally near the equator.

## Tropical Storm

Once a Tropical depression has intensified, it becomes a tropical storm. A tropical storm is a moderate tropical cyclone with maximum wind speed of 62 to 88 kph . A tropical storm is more organized and more circular in shape. The rotation of the tropical storm is more recognizable than that of a tropical depression. Severe tropical storm has maximum wind speed of 89 to 117 kph.

# Typhoon

It is an intensive tropical cyclone with maximum wind speed of 118 to 220 kph. Most of the time, a typhoon is accompanied by heavy rains and strong winds.



**THANK YOU!!**

