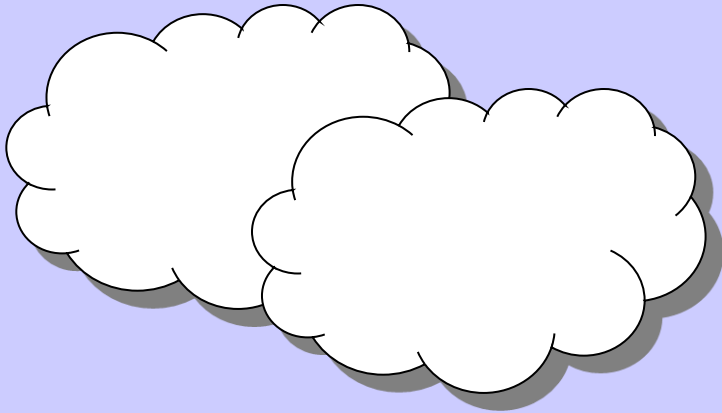
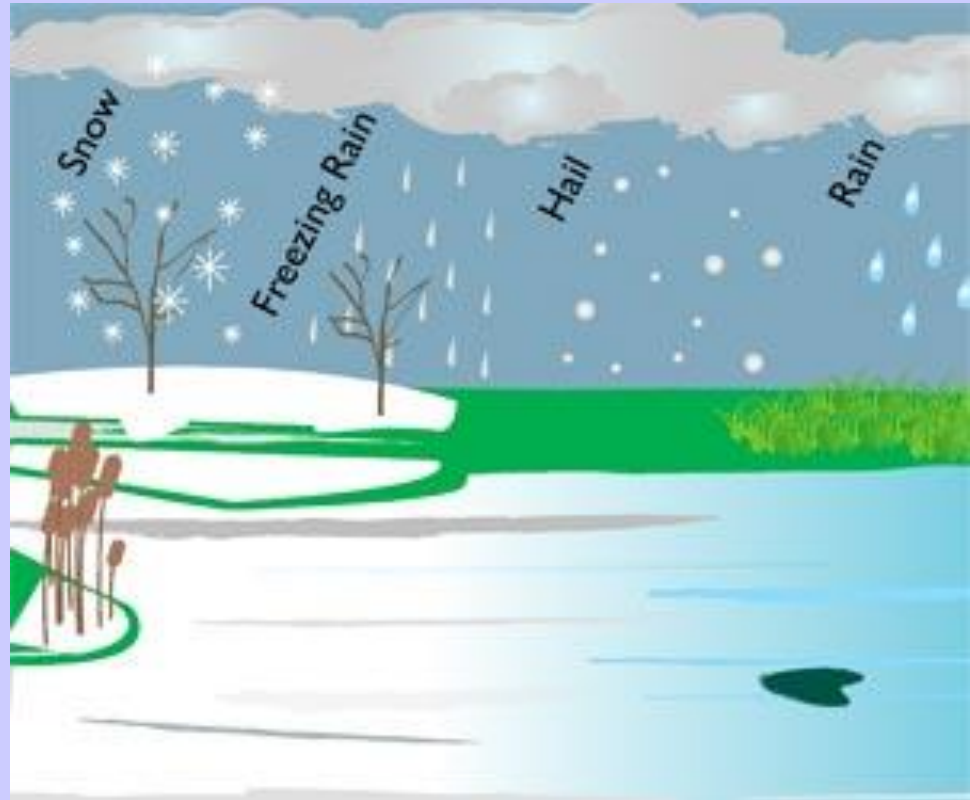


Today's Objective: How Are Clouds Formed?



Do Now:

How are clouds and precipitation related?



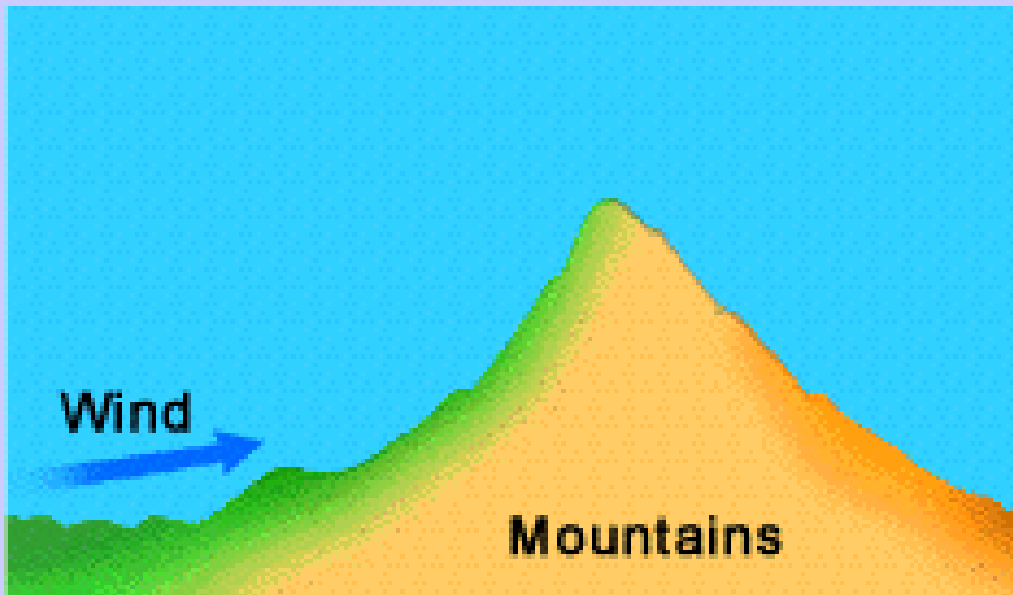
Formation of Clouds

1. Form when air rises in the atmosphere and is **cooled to the Dew Point Temp.**
2. Water vapor **condenses** around small solid particles (floating dust or salt) called **condensation nuclei.**
3. Tiny droplets then float in the air.



Orographic lifting:

occurs when mountains act as barriers to the flow of air, forcing the air to ascend.

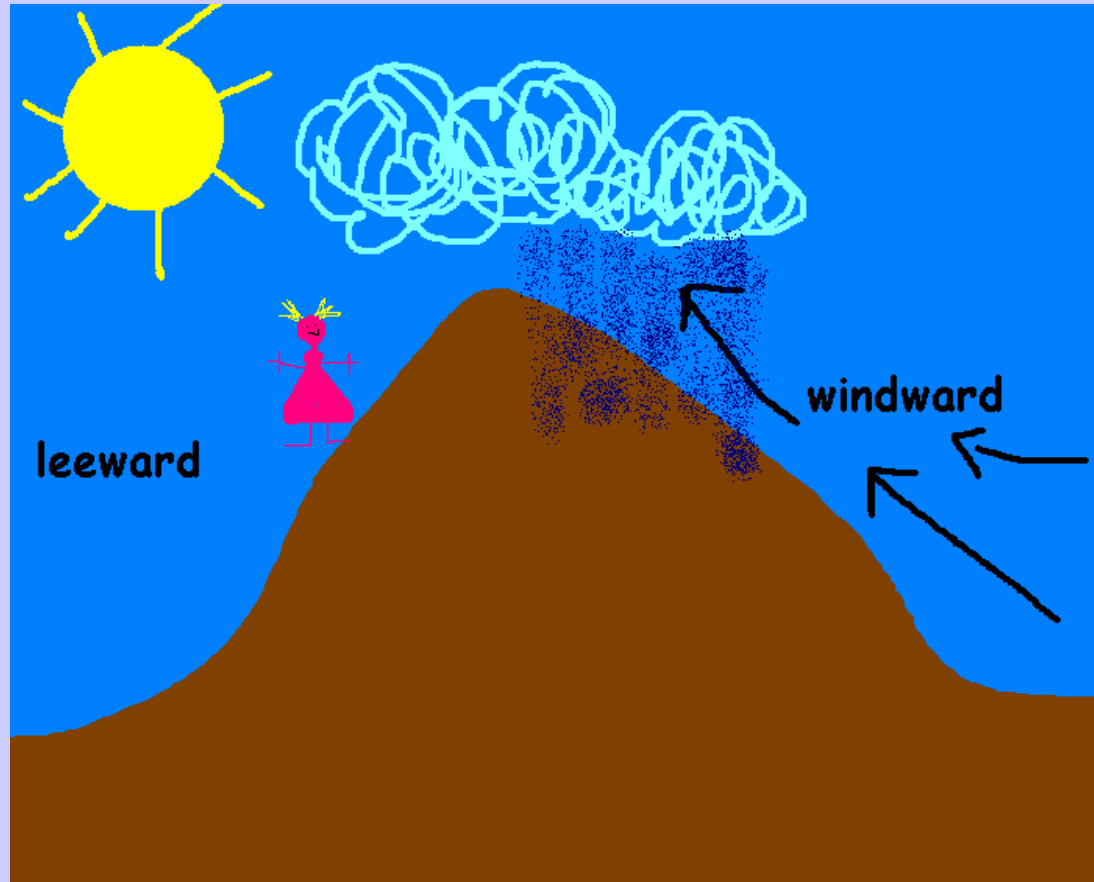


Air is pushed over the mountain, is cooled and then condenses into a cloud.

Orographic lifting:

Leeward

Warm
&
Dry



Windward

Cool
&
Wet

(as it rises in the atmosphere)

****When air expands, it
cools, and when air is
(as it sinks in the atmosphere)
compressed, it
warms.****

Clouds can help predict weather, each type of cloud means something different is happening in the atmosphere

Cloud Types:



Cumulus clouds, fly puffy and white.
Some look like cottonballs, fluffy and light.

The Nimbus clouds fly dark and low
When you see them, it means rain or snow.



Cirrus clouds are feathery and white
They're made of ice and fly at a great height



Stratus clouds have a layered look
stacking clouds like a book.



Fog is the lowest cloud you can see
Maybe a cloud that got caught in a tree.



FOG

- Is a cloud in contact with the ground.
- Most types of fog form when the relative humidity reaches 100% at ground-level.



Water droplets or ice crystals can grow to heavy to float in a cloud and fall to the Earth as PRECIPITATION

