

A bright blue sky with large, fluffy white cumulus clouds. The clouds are scattered across the frame, with a prominent one in the upper center. The text 'Cloud Types' is overlaid in the center in a large, bold, black font.

# Cloud Types

# **What are clouds?**

- A cloud is made up of tiny water droplets and/or ice crystals, a snowflake is a collection of many ice crystals, and rain is just liquid water.**

# Cloud Names

- **Names of specific types of clouds are created by combining the name of the cloud's shape with the name of the cloud's height.**

# Clouds

There are 3 main types of clouds:

- **Cumulus or fluffy clouds**
- **Stratus or layered clouds**
- **Cirrus or thin feathery clouds**



**Cumulus**



**Stratus**



**Cirrus**

# Cirrus



# Cirrus

- The word *cirrus* comes from a Latin word and means a tuft or curl of hair. Cirrus clouds are very wispy and feathery looking.

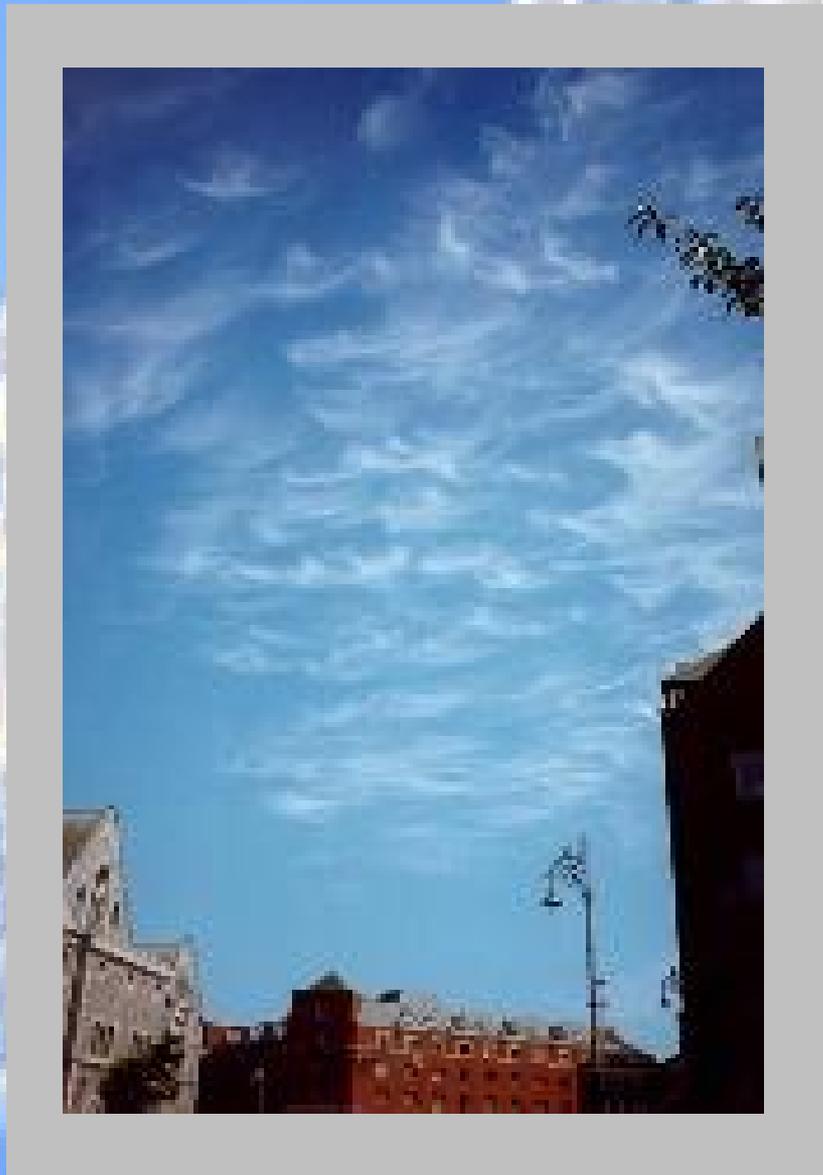
# Cirrus

- The long stringy cirrus clouds are called "mares' tails."









# Cirrus Clouds

- **Cirrus generally occur in fair weather and point in the direction of air movement at their elevation.**



# Cirrus Clouds



-- U. of Illinois Cloud Catalog --

# Low Clouds = Stratus

- **Stratus**
- **Stratocumulus**
- **Nimbostratus**

# **Stratus Clouds**

**Low clouds are made of water droplets. However, when temperatures are cold enough, these clouds may also contain ice particles and snow.**

# Stratus Clouds



-- Photograph by Ronald L. Holle --  
-- U. of Illinois Cloud Catalog --

# Stratus Clouds



# Stratus

The word *stratus* comes from the Latin word that means "to spread out." Stratus clouds are horizontal, layered clouds that stretch out across the sky like a blanket.



# Stratus Clouds

- **Stratus Clouds stretch across the sky in low, large flat layers. They resemble fog, but they do not reach the ground. They often produce mist or drizzle.**





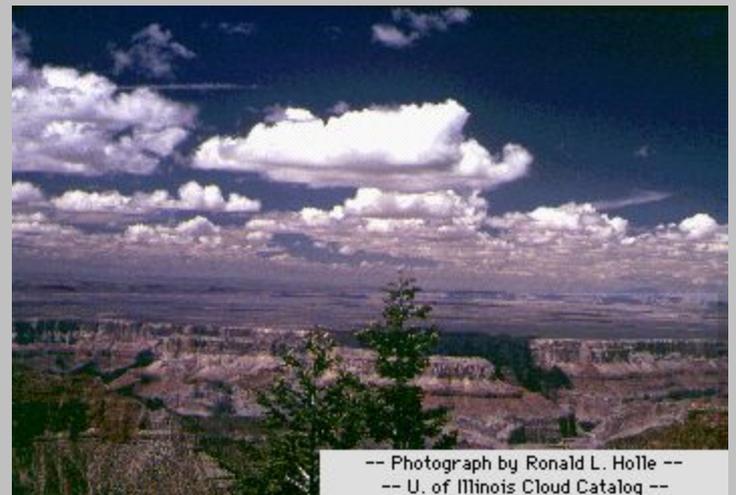


# Vertically Developed Cumulus Clouds

- Fair weather cumulus have the appearance of floating cotton and have a lifetime of 5-40 minutes. The word *cumulus* comes from the Latin word for a heap or a pile. Cumulus clouds are puffy in appearance. They look like large cotton balls.

# Cumulus Clouds

- **Harmless fair weather cumulus clouds can later develop into towering cumulonimbus clouds associated with powerful thunderstorms.**



-- Photograph by Ronald L. Holle --  
-- U. of Illinois Cloud Catalog --

# Cumulus

- **The clouds that produce heavy thunderstorms in summer are a form of cumulus clouds called cumulonimbus. Cumulonimbus clouds may extend upward for hundreds of meters.**

# Fair Weather Cumulus



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# Types of CLOUDS

42,500 ft.  
13,000m

**A cloud is a mass of floating water droplets or ice crystals.**

**High  
Clouds**

Cirrus

Cirrocumulus

Cirrostratus

39,000 ft.  
12,000m

20,000 ft.  
6,000m

**Middle  
Clouds**

Altostratus

Cumulonimbus

Alto cumulus

6,500 ft.  
2,000m

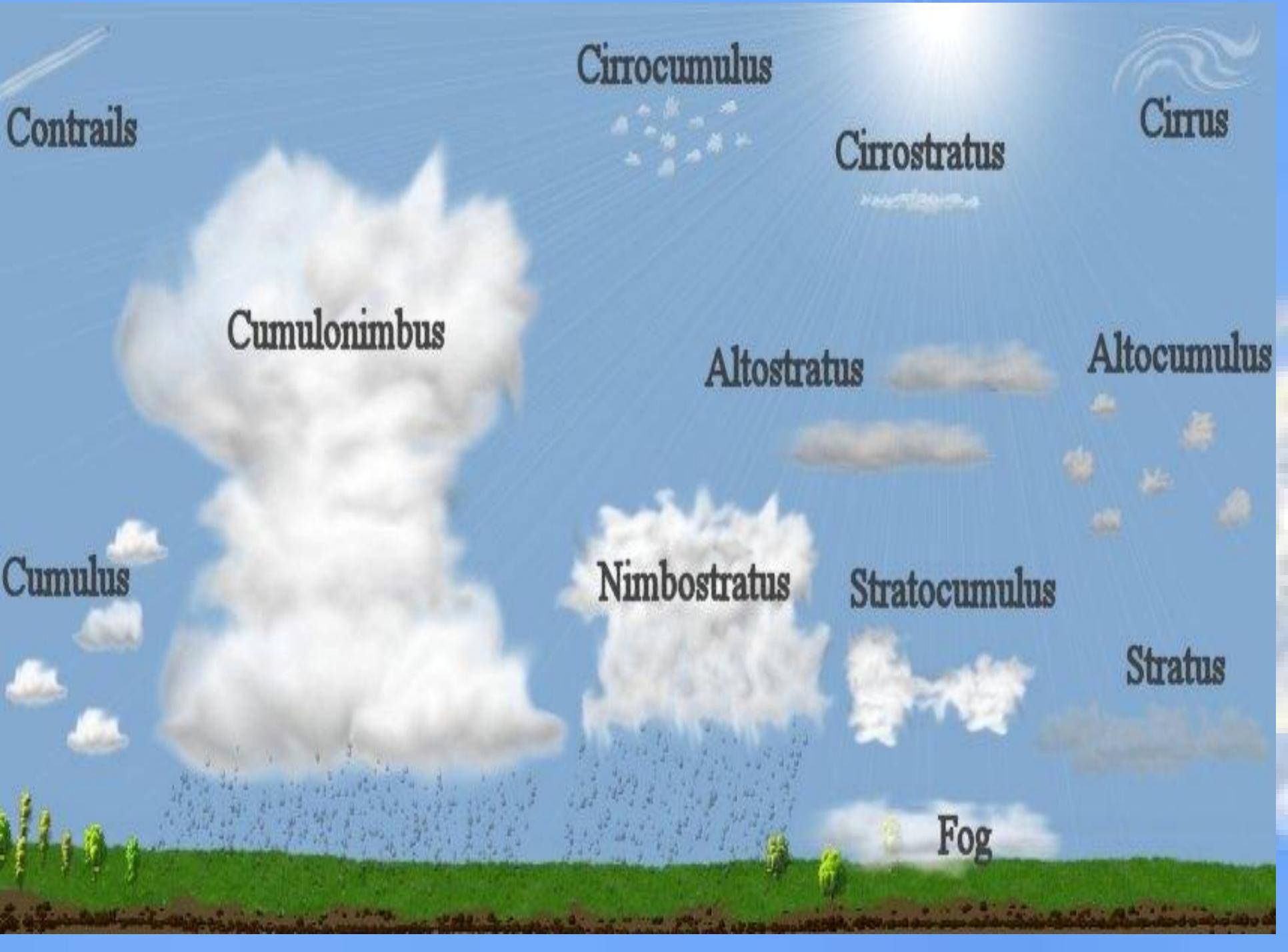
**Low  
Clouds**

Stratocumulus

Cumulus

Stratus

Nimbostratus



Contrails

Cirrocumulus

Cirrus

Cirrostratus

Cumulonimbus

Altostratus

Altostratus  
Altocumulus

Cumulus

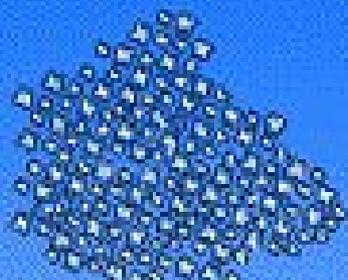
Nimbostratus

Stratocumulus

Stratus

Fog

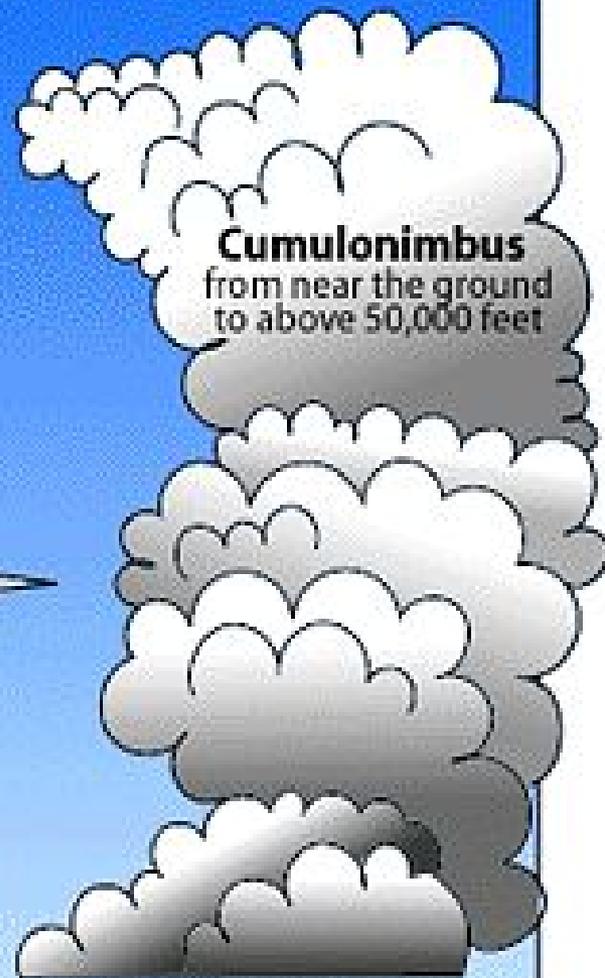
# Common types of clouds in the troposphere



**Cirrocumulus**  
(mackerel sky)  
above 18,000 feet



**Cirrus**  
above 18,000 feet



**Cumulonimbus**  
from near the ground  
to above 50,000 feet



**Alto cumulus**  
6,000 to 20,000 feet



**Altostratus**  
6,000-20,000 feet



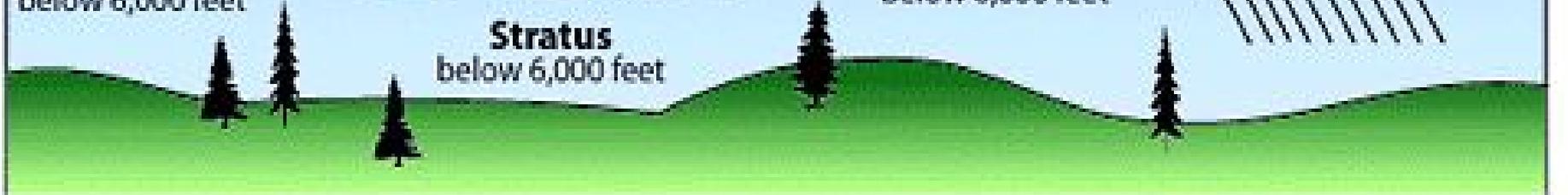
**Cumulus**  
below 6,000 feet

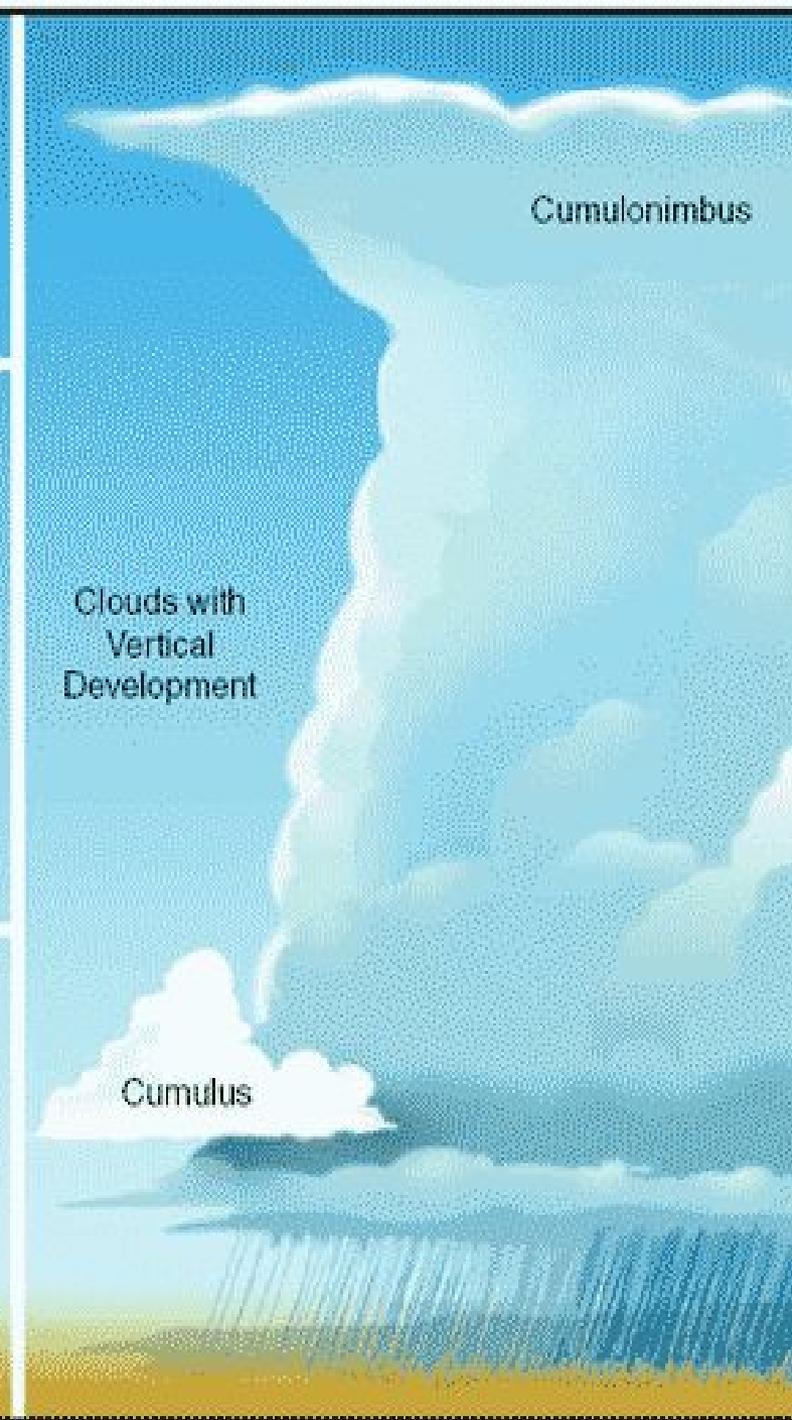
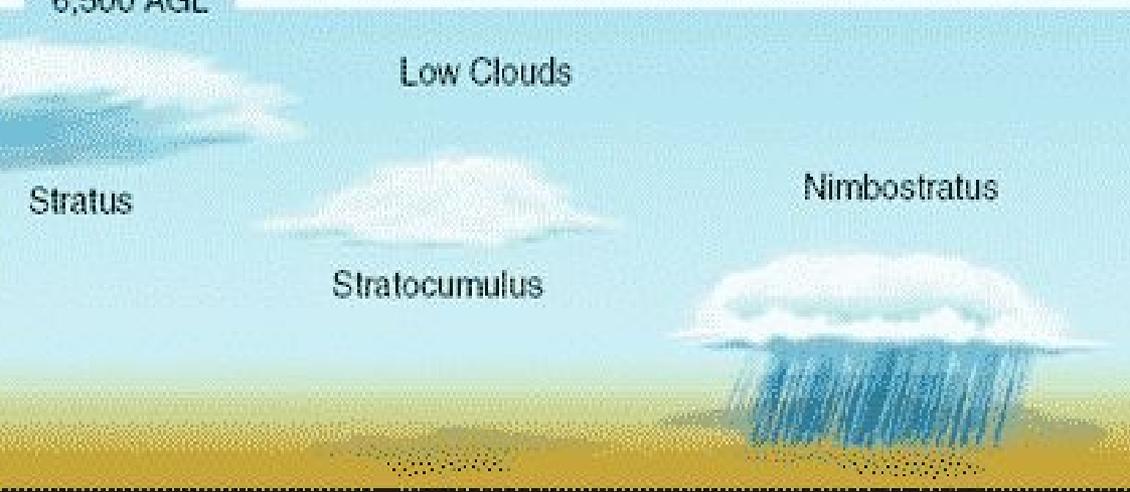
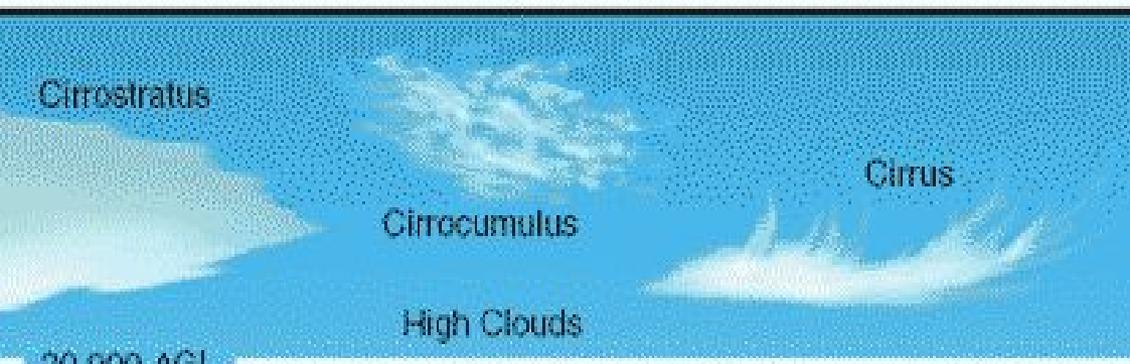


**Stratocumulus**  
below 6,000 feet



**Stratus**  
below 6,000 feet





# **Writing Activity:**

- **Write a paragraph about one type of cloud. Include 3 or more facts about the cloud.**