Warm up

- -Get out your chromebook
 -record the hurricanes (including tropical storms, tropical depressions, and remnants)
 on your map you got last week. Include storm name, today's date, and wind speed.
- -On the next page of your notebook, write a journal entry reflecting on Hurricane Florence (i.e. what you saw on the news, what you experienced, how you felt, etc.)
 - **Have your homework out for me to come around and check, unless it was turned in on Google Classroom.

Clouds and Precipitation

Clouds and Precipitation



Clouds

 Clouds are masses of tiny water droplets or ice crystals.

 There are different kinds of clouds. They can be classified by their features.

• The water from clouds may fall to Earth as rain, snow, sleet, of hail (precipitation).

How Clouds Form

- Clouds form when water vapor in the air condenses (turns back into a liquid).
- Warm air near Earth's surface holds water vapor.
 As the warm air rises, it moves into a cooler part
 of the atmosphere. Since cool air can't hold much
 water vapor, the vapor condenses around dust
 particles in the air.
- Tiny droplets of liquid water form. This can be ice crystals if the air is cold enough. Clouds are made of water droplets, ice crystals, or both.

Types of Clouds

 There are 3 main types of clouds including cirrus, stratus, and cumulus.

- Observing these clouds can help you predict what type of weather is on the way.
- Clouds are also labeled according to their altitude. Cirrostratus, altostratus, and stratus.

Stratus Clouds

 Low, sheet-like gray clouds

 Looks like a gray blanket covering the whole sky

 Some stratus clouds can bring rain



Cumulus Clouds

- Puffy, often flat on the bottom
- Seen in nice weather
- Higher in the sky than stratus clouds
- When these clouds become big and dark, they are called <u>cumulonimbus</u>, which bring rain, thunder, and lightning.





Cirrus Clouds

The highest clouds

Look wispy, like feathers

 Form where air is cold, so they are made up of ice crystals



 Seen in fair weather, but rain often follows in a day or two

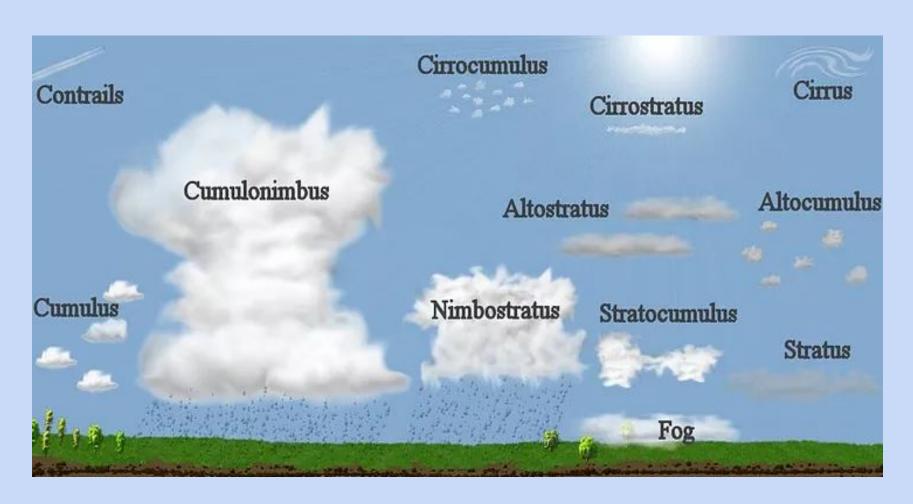
Fog

Fog is a cloud at or near the ground.

 Meteorologists will use the term visibility to tell how far you can see in fog (in miles).

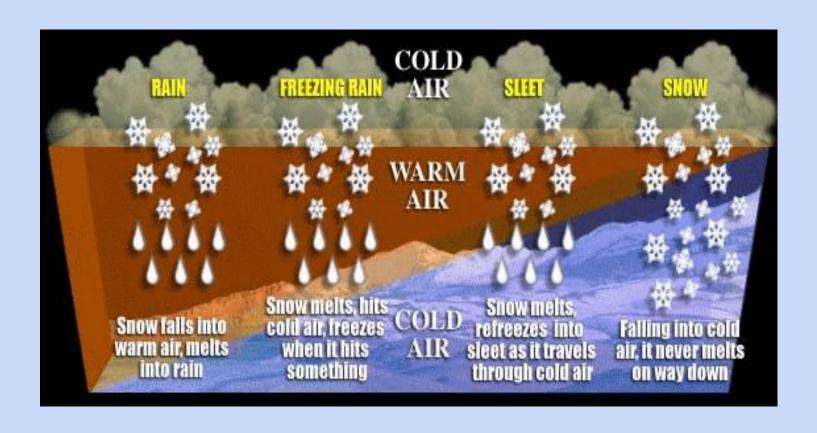


Types of clouds at different altitudes

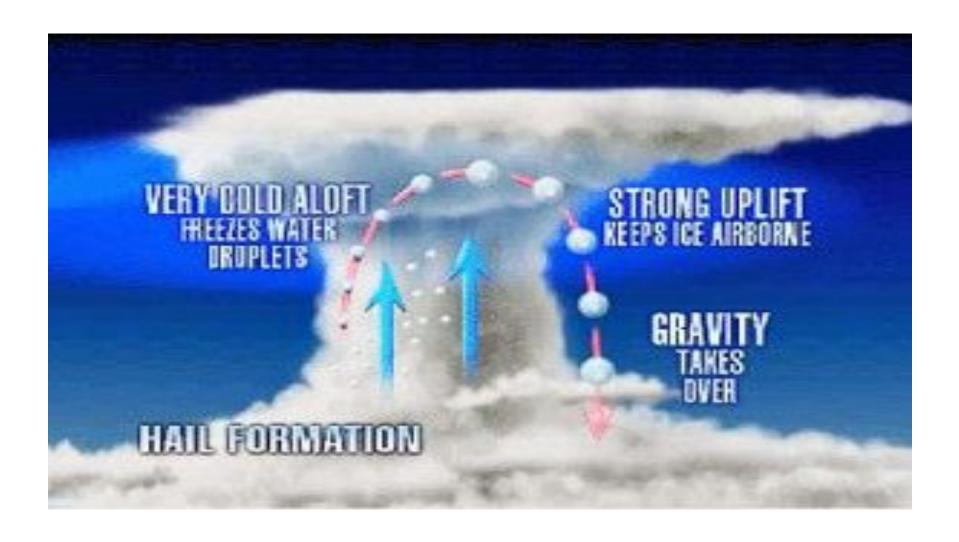


Precipitation

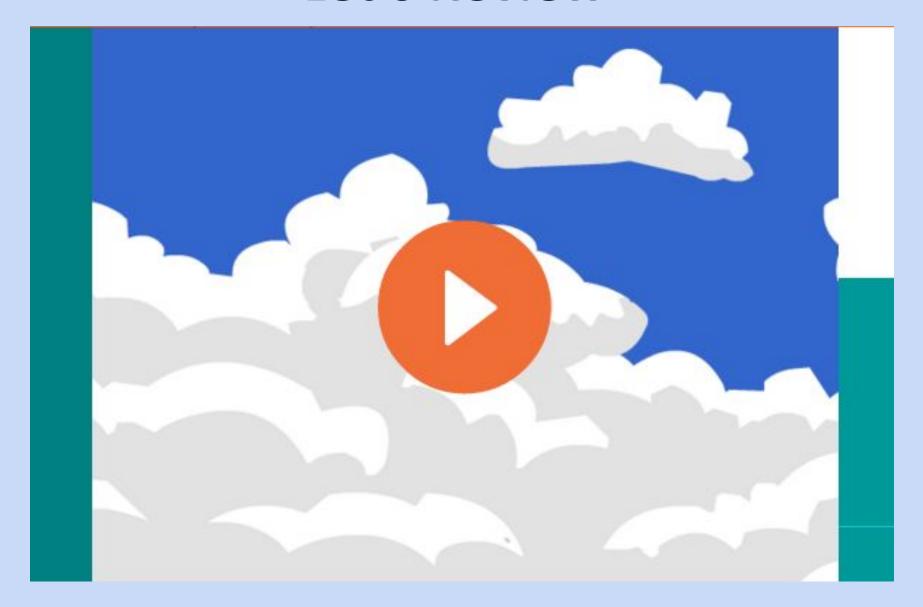
 Precipitation is water that falls from the atmosphere; can be rain, snow, sleet, or hail.



How Does Hail Form?



Let's Review



Review Sites

- To learn more about clouds, click the links.
 - http://www.weatherwizkids.com/weather-clouds.htm
 - http://scied.ucar.edu/webweather/clouds/cloudmatching-game
 - http://www.funtrivia.com/html5/index.cfm?qid=32985
 - https://www.youtube.com/watch?v=-qt6AkP9nPw

Homework

Record the types of clouds you see for 5 days. Record the type, description and a picture.

Quizletlive