6th Grade Chapter 8 Review

Precipitation

The difference between sleet and hail is the temperature of the ice pellets, the size of the ice pellets and where the ice pellets formed. Most of the world receives more rain than snow. Rain or snow usually is associated with falling air pressure.

Weather Tools

Radar weather data would enable a meteorologist to follow the path of an approaching thunderstorm.

Small lines at the end of the shaft that represents wind direction on a weather map indicate wind speed.

Relative humidity can be measured with a psychrometer.

Wind speed is measured with an anemometer.

The amount the circle is colored in represents the relative humidity. The white represents the amount of sun and the black represents the amount of cloud.

Isobars are lines on a map joining places that have the same air pressure.

Isotherms are lines on a map joining places that have the same air temperature.

Air pressure is measured with a barometer.

Temperature is measured with a thermometer.

The number to the left of the circle represents the air temperature.

The number to the right of the circle represents the air pressure.

Weather Fronts

A continental tropical air mass that formed over northern Mexico would bring hot and dry weather to the southwestern United States.

A continental polar air mass that formed over northern Canada would bring cold and dry weather to the northern and central United States.

When a warm air mass and a cold air mass meet and neither can move the other, the result is a stationary front.

When a warm air mass overtakes a cold air mass, it forms a warm front.

Cold, dry air affecting the northern United States in winter often comes from continental polar air masses that come down from Alaska and Canada.

The three main types of clouds are cumulus, stratus, and cirrus.

Cold, humid air masses that bring fog to the West Coast are maritime polar air masses.

A maritime tropical air mass from the Gulf of Mexico would bring warm and moist weather to the southern United States.

Two conditions are required for cloud formation: cooling of the air and the presence of particles in the air.

In the continental United States, air masses are commonly moved by the prevailing westerlies and jet streams.



Storms

Tornado Alley includes the states of South Dakota, Iowa, Nebraska, Kansas, Oklahoma, and Texas.

If people are asked to evacuate during a hurricane watch, they are being asked to leave the area temporarily.

Tornadoes form in the same kind of cloud as thunderstorms.

Hurricanes typically form over warm ocean water near the earth's equator.

A storm is a violent disturbance in the atmosphere.

One of the best places to seek protection during a tornado is in a first floor bathroom, a room with no windows, or the basement of a well-built building.

Cyclones are low pressure areas with winds moving toward the center and anticyclones are high pressure areas where the winds move away from the center. Weather associated with an anticyclone is generally dry and clear.

Weather associated with a cyclone is generally wet and cloudy.

A funnel-shaped cloud that touches Earth's surface is called a tornado.