

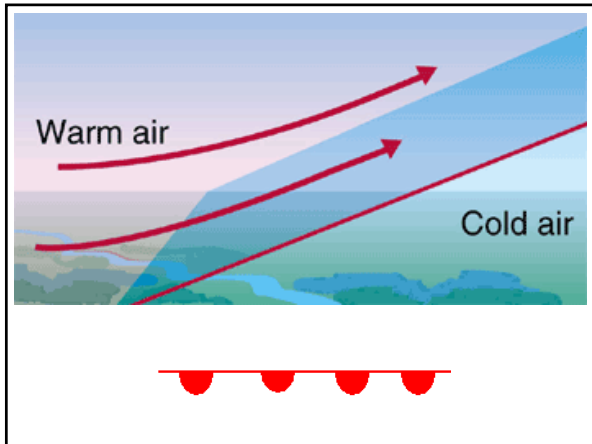
Weather Terms

Fronts

- Boundaries between warm air mass and cold air mass
- Result in precipitation

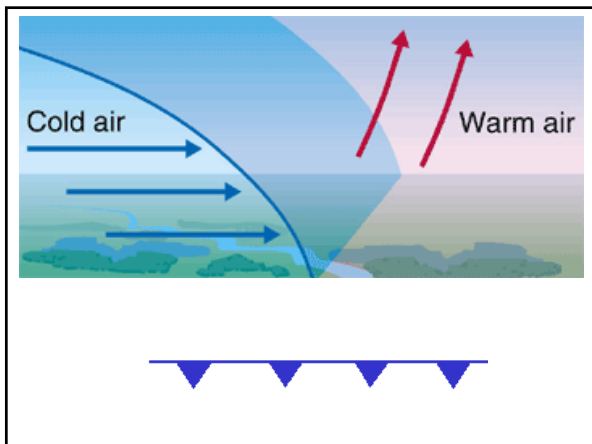
Warm Front

- Warm air mass meets and rises above cold air mass
- Slow, steady rain
- Hot, humid weather follows
- Gentle slope



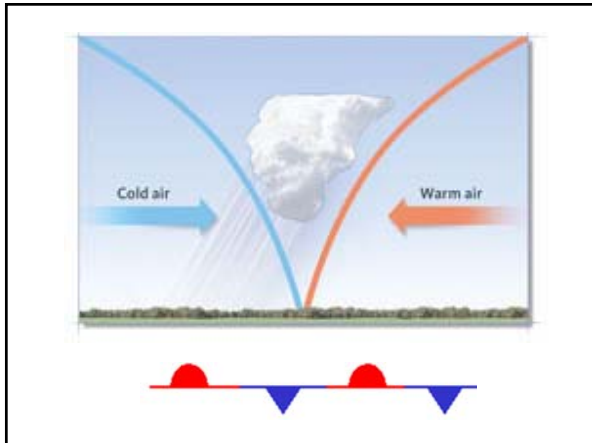
Cold Front

- Cold air mass overtakes and pushes under the warm air mass
- Heavy rains and violent thunderstorms
- Fair, cool weather follows
- Steep slope



Stationary Front

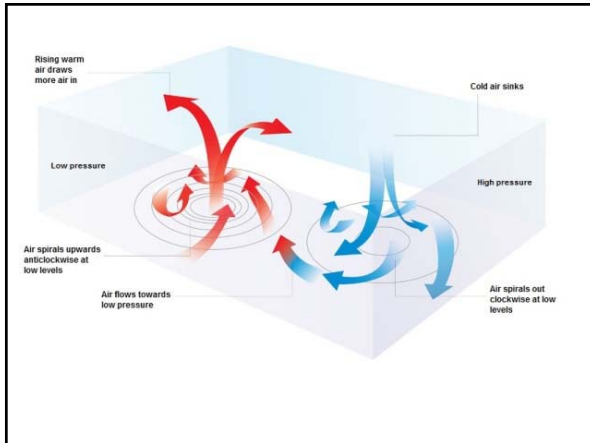
- Cold air mass and a warm air mass run into each other but, neither is able to make the other move out of the way
- Cloudy, overcast, some light showers or drizzle
- Conditions do not change until one of the fronts starts to move again



Pressure Systems

- The Earth's atmosphere exerts a pressure on the surface
- Standard pressure at sea level is defined as 101.3 kPa, but the actual pressure in an area varies
- These areas are all relative to each other - so what defines high pressure will change depending on the area around it

- Areas of high and low pressure are caused by ascending and descending air
- As air warms, it ascends leading to low pressure at the surface
- As air cools, it descends leading to high pressure at the surface

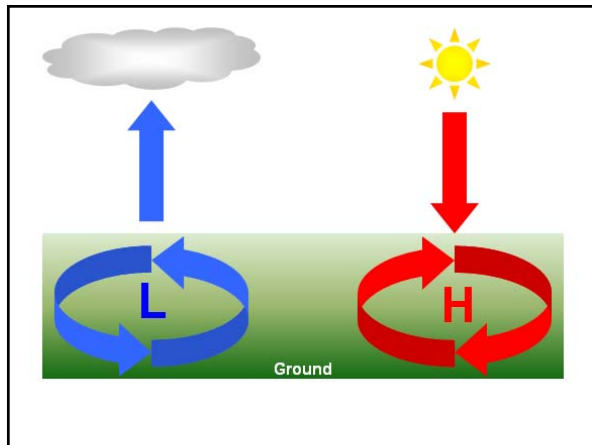


High Pressure System

- The winds tend to be light and blow in a clockwise direction (in the northern hemisphere)
- The air is descending, which reduces the formation of cloud and leads to light winds and settled weather conditions

Low Pressure System

- Wind blows in a counterclockwise direction (in the northern hemisphere)
- The air is rising
- As it rises and cools, water vapor condenses to form clouds and perhaps precipitation
- Weather is often unsettled
- There are usually frontal systems associated with low pressure systems



Weather Map Examples

