

# Weather Fronts

## Conflicting Fronts

- When two fronts meet, their different densities and temperatures cause one to be lifted above another.
- Wind is produced by the differences in the fronts: the stronger the difference, the stronger the wind is.
- When a moist front is lifted up, precipitation and storms will occur.

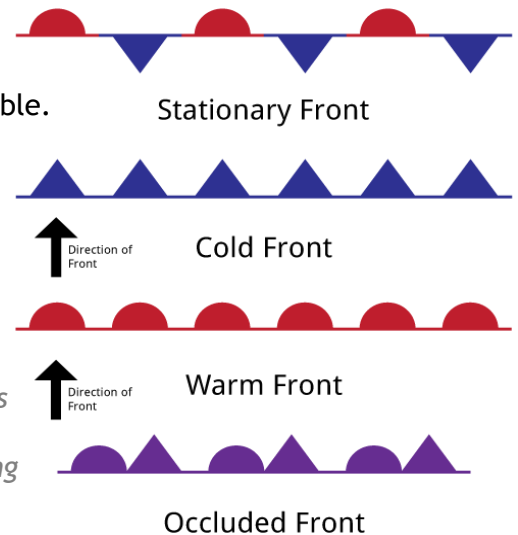
### Study Tip

Warm air rises, and cold air sinks. This will help you remember how cold fronts and warm fronts are formed.

## Types of Fronts

- A **stationary front** does not move due to a barrier such as a mountain range or another air mass. Rain, drizzle, and fog often occur, and winds parallel to the front come from both directions.
- A **cold front** occurs when a cold air mass pushes up and replaces a warm air mass. These fronts produce rain showers, snow showers, and thunderstorms with blustery winds. A cold front's weather can change by the season. Tornadoes and strong winds can occur near cold fronts during the spring and the summer, while rains and heavy snows typically occur during the fall or winter. A **squall line** is a bunch of severe thunderstorms that form near a cold front.
- A **warm front** happens when a warm air mass slides over a cold air mass, causing the atmosphere to become relatively stable.
- An **occluded front** typically forms in low-pressure systems when a cold front catches up to a warm front.
- An **occlusion front** occurs when a third front catches up to an occluded front. If the third front is colder than both, then it is a cold occlusion; if the third front is warmer than both, then it is a warm occlusion. Weather at occlusion fronts is fierce.

*Some of the most drastic weather changes occur when weather fronts conflict.*



*The first four different types of weather fronts are fundamental in understanding how the weather changes. (Graphic by Stephen Song)*

## Concept Check

- Describe the five types of fronts.
- What is a squall line?