

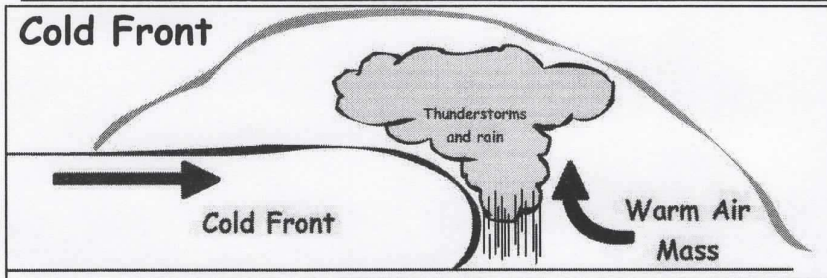
Weather Fronts: Introduction

Name _____

Instructions: Read through the Weather Front descriptions.

Then complete the "What Type" questions at bottom of page.

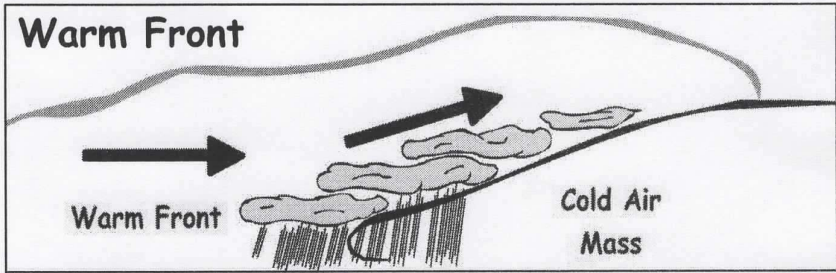
Cold Front



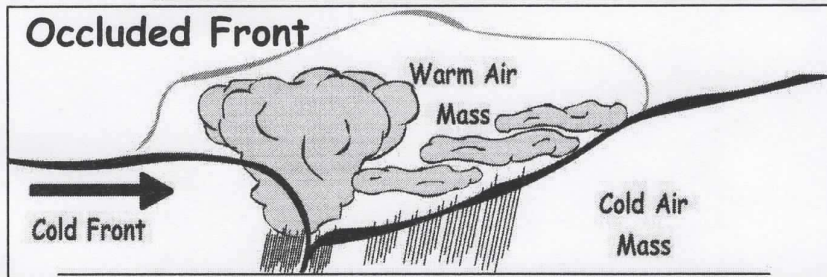
A **Cold Front** moves faster than a warm air mass. The warm humid air is pushed up and results in a short period of heavy rain and possibly violent thunderstorms.

A **Warm Front** moves slower than a cold air mass. The warm raises steadily above the cooler air mass and causes gentle rain showers for longer periods of time.

Warm Front



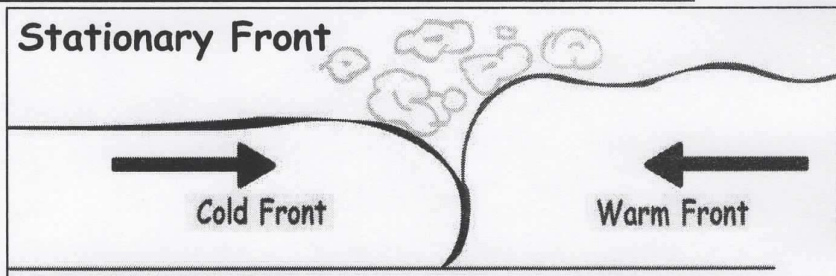
Occluded Front



An **Occluded Front** is a combination of two fronts that form when a cold front catches up and overtakes a warm front. The result is a mix of rain showers and thunderstorms.

A **Stationary Front** is the boundary between two air masses when neither is moving. Clear skies to partly cloudy skies may result, with occasional light rain.

Stationary Front



What Type?

Cold Front

Warm Front

Occluded Front

Stationary Front

1- What type of front produces gentle rain showers? _____

2- What type of front involves 3 different air masses? _____

3- What type of front may have clear skies? _____

4- What type of front creates violent thunderstorms? _____

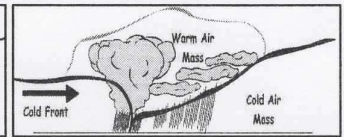
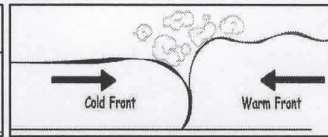
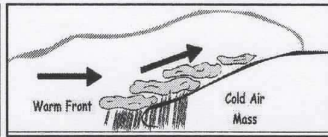
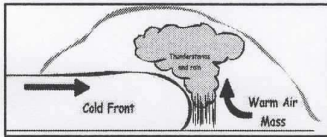
5- What type of front is stalled or still? _____

6- What type of front has rain showers and thunderstorms? _____

Weather Fronts: Investigation

Name _____

Instructions: Use the word bank to fill in the blanks in the weather front paragraph.

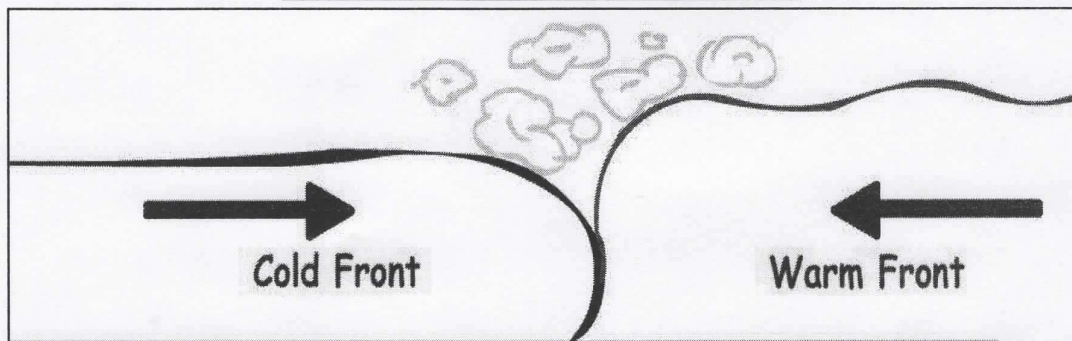


- Word Bank -

above change masses boundary two direction
 period cloudy thunderstorms cold
 overtakes temperature

Weather Fronts mark the _____ between two air masses. The air masses can have large _____ differences on either side of the front. When a weather front passes, there is often a _____ in wind _____ as well as changes in temperature. **Cold Fronts** occur when a colder air mass _____ a warmer air mass. This can create a short _____ of heavy rain and strong _____. **Warm Fronts** move slower than cold air _____. A warm front will steadily rise _____ the cooler air and create gentle rain showers. An **Occluded Front** is formed when a _____ front catches and overtakes a warm front. A mix of rain and thunderstorms can occur as a result. A **Stationary Front** is the boundary between _____ air masses that are not moving. Clear skies or partly _____ skies may occur, with occasional light rain.

Instructions: Color the Warm Air RED and the Cold Air BLUE. Then label the diagram with the correct weather front name.



High and Low Pressure:

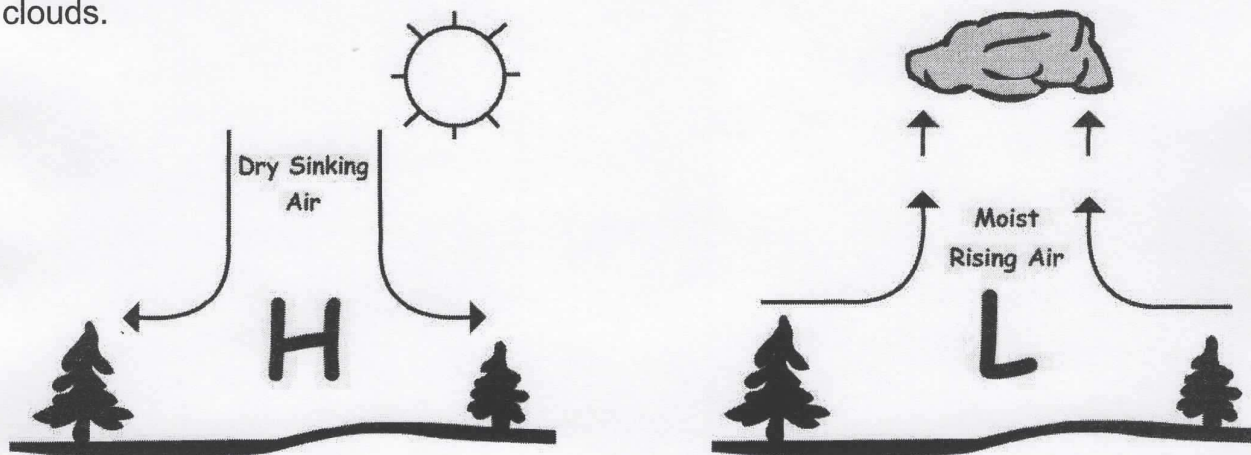
Introduction

Name _____

Instructions: Read through the information below.

Then complete the High / Low statements at bottom of page.

Weather can vary day to day and place to place. One of the many factors of our daily weather is *Air Pressure*. **Highs** and **Lows** are areas where the air pressure is higher or lower than surrounding areas. Weather maps show these areas using a large "H" to represent High pressure and a large "L" to represent Low pressure. As these Highs and Lows travel across the country, they bring changes in weather. Generally High pressure areas bring fair weather with clear skies, while Low pressure brings stormy weather and clouds.



Each type of pressure has its own characteristics. High pressure systems rotate clockwise and contain sinking dry air. Low pressure systems rotate counterclockwise and contain moist rising air.

Circle the correct choice for each statement as High or Low :

- | | |
|--|-------------|
| 1- This type of air pressure is sinking. | High or Low |
| 2- This type of air pressure causes rain and clouds. | High or Low |
| 3- This type of air pressure is rising. | High or Low |
| 4- This type of air pressure rotates clockwise. | High or Low |
| 5- This type of air pressure means sunny skies. | High or Low |
| 6- This type of air pressure rotates counterclockwise. | High or Low |
| 7- This type of air pressure is represented by an "H". | High or Low |
| 8- This type of air pressure contains dry air. | High or Low |

High and Low Pressure:

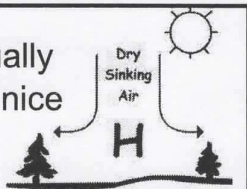
Name _____

Weather Map

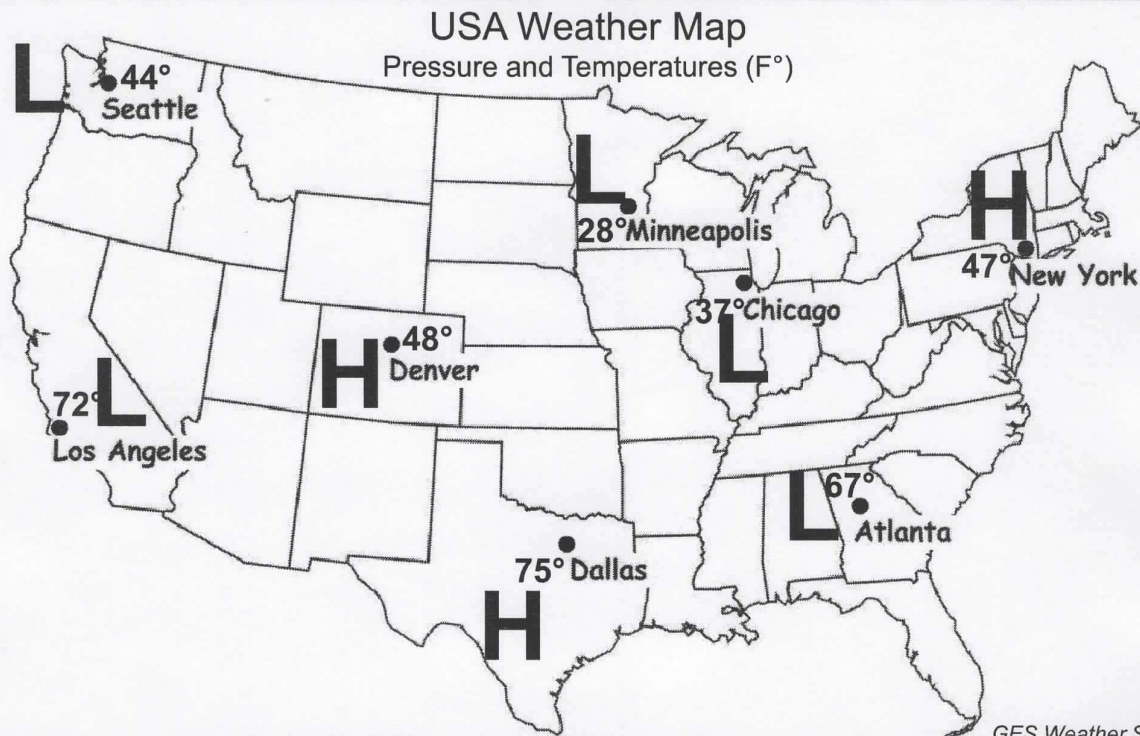
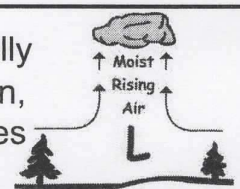
Instructions: Look at the USA weather map below.

Then complete the weather forecast for the chosen cities.

High pressure, "H" usually means clear skies and nice sunny weather.



Low pressure, "L" usually means cloudy skies, rain, and snow if temperatures are cold enough.



USA City Forecast – Select the best weather forecast for each city by circling your choice.

City	Forecast 1	Forecast 2	Forecast 3
Dallas	Sunny Skies	Rain Showers	Snow Flurries
Seattle	Sunny Skies	Rain Showers	Snow Flurries
Minneapolis	Sunny Skies	Rain Showers	Snow Flurries
Atlanta	Sunny Skies	Rain Showers	Snow Flurries
Denver	Sunny Skies	Rain Showers	Snow Flurries
New York	Sunny Skies	Rain Showers	Snow Flurries
Chicago	Sunny Skies	Rain Showers	Snow Flurries
Los Angeles	Sunny Skies	Rain Showers	Snow Flurries

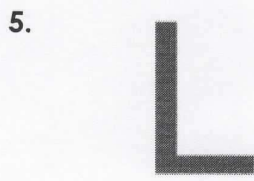
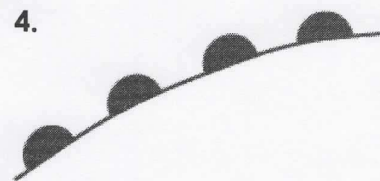
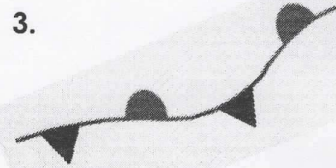
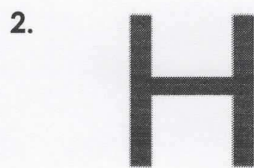
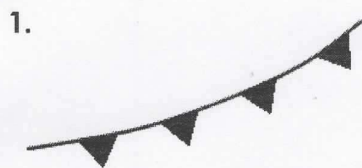
Air Pressure & Fronts Practice

Name: _____ Date: _____

Part I - Map Symbols

Directions: Label the different symbols with the correct name.

cold front stationary front warm front low pressure high pressure



Part II - Matching

Directions: Use the word bank from part one to match the names to the definitions. Some words may be used more than once.

1. _____ - thunderstorms are often produced ahead of this type of front
2. _____ - this pressure system brings dry, clear skies
3. _____ - this type of air pressure is associated with warm air rising
4. _____ - this type of front is stalled and rain may linger for days
5. _____ - this pressure system brings cloudy and stormy weather
6. _____ - this type of front brings warmer temperatures
7. _____ - this type of air mass is when cold air sinks
8. _____ - the temperatures plummet with this type of weather front