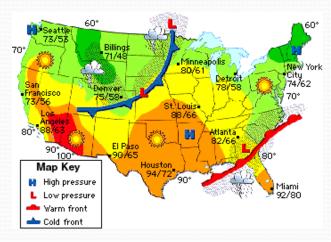
# How Do We Read Weather Maps?

4<sup>th</sup> Grade Weather Unit Alief ISD

#### What do you notice about the pictures below?





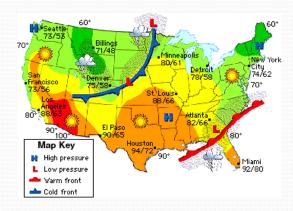




## What do you call these pictures?

These pictures are examples of weather maps.









## What is a weather map?

- A <u>weather map</u> is a *tool* used to show the weather at a given time in a given area. These maps are used to give you an idea about the weather in a particular area and to *predict future weather*.
- A <u>weather map</u> uses *various symbols* to describe the type of fronts, pressure systems, and direction that the fronts are moving.

A few important weather symbols shown on a weather map are:

- High and Low Pressure Symbols
- Weather Fronts Symbols
- Cloud Cover and Precipitation Symbols

#### **High and Low Pressure Symbols**

The **high pressure** and **low pressure** systems signify whether or not there will be precipitation in an area.



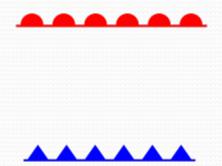
A low pressure system will bring precipitation and severe storms.



A high pressure system will bring pleasant weather conditions with no precipitation and little cloud coverage.

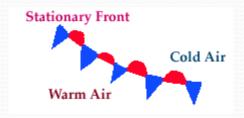
#### Weather Fronts Symbols

These symbols shown above are very crucial to the weather. Fronts dictate weather or not there will be cloud cover and precipitation and how much will be brought about in one area.



A <u>warm front</u> produces extensive cloudiness and precipitation. Therefore, seeing the warm front symbol, expect these conditions in the area in front of the front line.

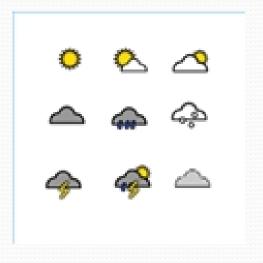
A <u>cold front</u> produces storms such as, thunderstorms, tornadoes, high-level clouds, etc. to occur within the area it approaches. These storms will occur directly in front of the front, and after the front has passed the temperature will decrease.



A <u>stationary front</u> produces extensive cloud coverage and heavy precipitation. A stationary front can lead to a flood in the area in which it occurs. A stationary front is caused by two air masses that meet and stall.

### **Cloud Cover and Precipitation Symbols**

Most weather maps show current precipitation and cloud cover conditions with cloud and sun symbols. This image shows the most commonly used symbols.

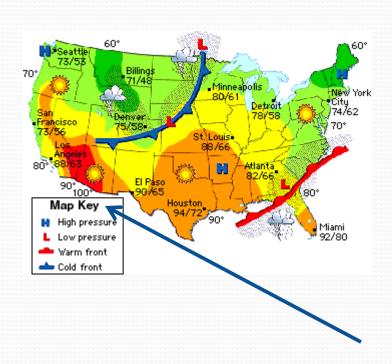


Top row (left-right): Sunny, partly cloudy, mostly cloudy

Middle row (I-r): Overcast, rain, snow

Bottom row (I-r): Thunderstorms, scattered or isolated thunderstorms, fog

## What is a Map Key?



A key on a map is used to explain what each map symbol represents.