

# CHAPTER 2 NOTES

NAME \_\_\_\_\_

Humidity- \_\_\_\_\_

\_\_\_\_\_

Relative humidity – \_\_\_\_\_

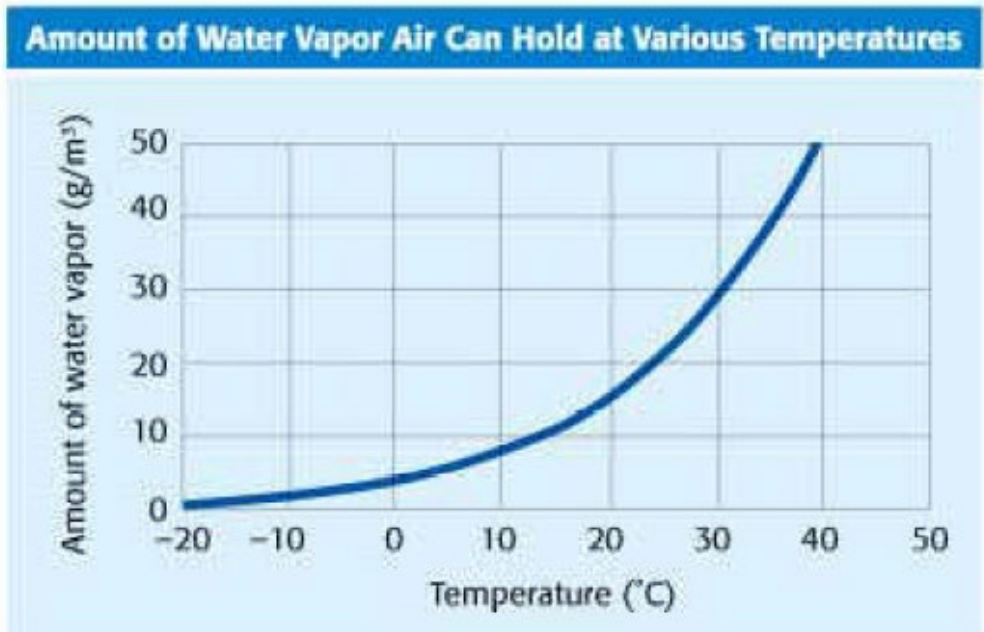
\_\_\_\_\_

30deg & 15 g/m<sup>3</sup>  
\_\_\_\_\_ % humidity

20deg & 15 g/m<sup>3</sup>  
\_\_\_\_\_ % humidity

40deg & 40 g/m<sup>3</sup>  
\_\_\_\_\_ % humidity

40deg & 10 g/m<sup>3</sup>  
\_\_\_\_\_ % humidity



**RELATIVE HUMIDITY FORMULA:**

$$\frac{\text{actual amount of water vapor}}{\text{amount of water vapor the air can hold}} \times 100$$

Psychrometer- \_\_\_\_\_

\_\_\_\_\_

**Saturated** – \_\_\_\_\_

(can be achieved in 2 ways)

- a) Add more \_\_\_\_\_ to the air
- b) \_\_\_\_\_ the temperature of the air

**Dewpoint-** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Condensation Nuclei-** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Clouds** – \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Cirrus** – \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Cumulus-** \_\_\_\_\_

\_\_\_\_\_

White=

Grey=

**Stratus-** \_\_\_\_\_

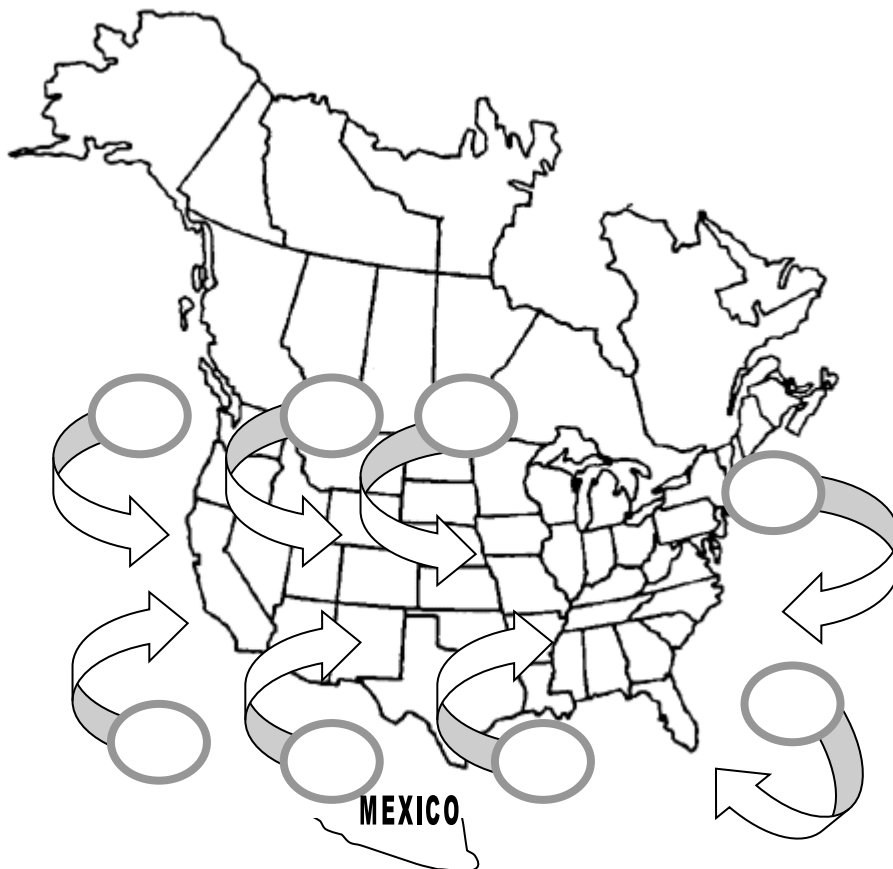
\_\_\_\_\_  
\_\_\_\_\_

**Fog**- \_\_\_\_\_  
\_\_\_\_\_

**Cirro, cirrus** = \_\_\_\_\_  
\_\_\_\_\_

**Alto** = \_\_\_\_\_  
\_\_\_\_\_

**Air mass**— \_\_\_\_\_  
\_\_\_\_\_



**Maritime**=

**Continental**=

**Polar**=

**Tropical**=

# A Fronts – \_\_\_\_\_

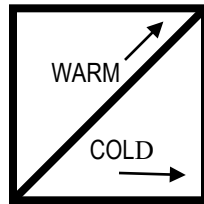


\_\_\_\_\_  
\_\_\_\_\_

## Warm front- \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

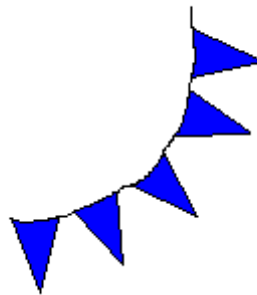
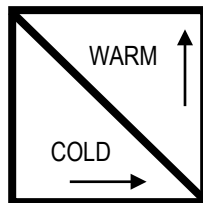


## Cold front— \_\_\_\_\_

(rapid rising of warm air)

1 \_\_\_\_\_

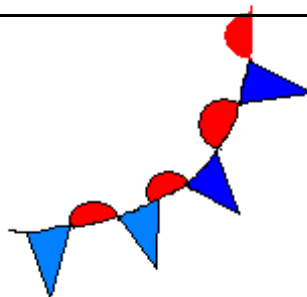
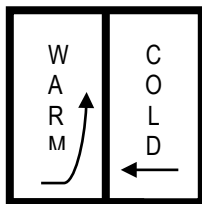
2 \_\_\_\_\_



## Stationary front- \_\_\_\_\_

1 \_\_\_\_\_

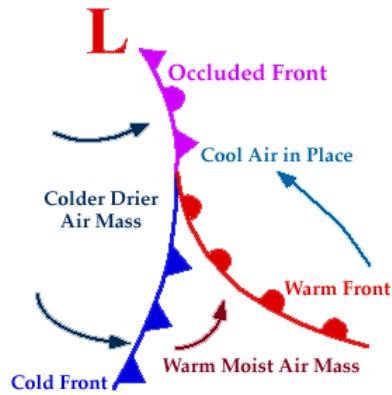
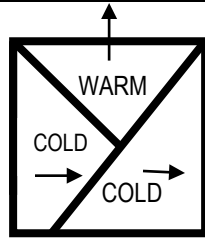
2 \_\_\_\_\_



# Occluded front-

1

2



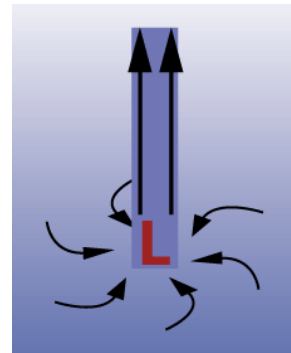
## B Wind

1)

- c) No difference in pressure=
- d) Small difference in pressure=
- e) Great difference in pressure=

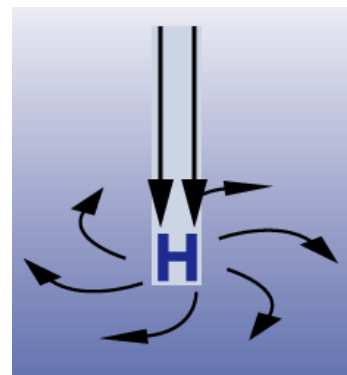
## C Cyclone-

- 1) Rotation=
- 2)
- 3) weather=



## D Anticyclone-

- 1) Rotation=
- 2)
- 3) Weather=



## Severe weather 2-3-

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### A Thunderstorms—small intense weather systems

1 Strong winds-caused when \_\_\_\_\_ falling to earth push \_\_\_\_\_ out of the way and form big \_\_\_\_\_ between the colliding \_\_\_\_\_

2 Heavy rain- caused by great volumes of \_\_\_\_\_ rising

3 Lightning- an \_\_\_\_\_ between \_\_\_\_\_ areas and \_\_\_\_\_ areas

- a)
- b)
- c)

4 Thunder- the sound that comes from the \_\_\_\_\_ and \_\_\_\_\_ of air due to a \_\_\_\_\_. (air molecules slamming into each other)

5 Negative effects:

a)

b) Flash floods- caused by the ground not being able to \_\_\_\_\_ the excessive rain

- c)
- d)
- e)
- f)

(from the lightning)

6 Safety measures:

- a)
- b)

### B Tornadoes-

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- 1 Wind speeds
  - a)
  - b)
- 2 Size
  - a) Destruction path-
  - b) Width of funnel-
- 3 Duration -
- 4 Safety measures:
  - a)
  - b)
  - c)

C **Hurricane-** \_\_\_\_\_

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- 1 Wind speed-
- 2 size
  - a) Destruction path-
  - b) Width of storm--
- 3 Duration -
- 4 Formed when a group of \_\_\_\_\_ storms meet over the \_\_\_\_\_, and then \_\_\_\_\_ due to winds from different \_\_\_\_\_
- 5 **Storm surge-** \_\_\_\_\_ of \_\_\_\_\_ that builds up due to the \_\_\_\_\_ and \_\_\_\_\_ .
- 6 Safety measures:
  - a)
  - b)
  - c)
  - d)
  - e)

## Forecasting the Weather 2-4

D Weather forecast-

E Meteorologist –

F Weather instruments:

1 Thermometer- \_\_\_\_\_  
\_\_\_\_\_

2 Barometer- \_\_\_\_\_  
\_\_\_\_\_

3 Windsock— \_\_\_\_\_  
\_\_\_\_\_

4 Wind vane – \_\_\_\_\_  
\_\_\_\_\_

5 Anemometer- \_\_\_\_\_  
\_\_\_\_\_

6 Psychrometer- \_\_\_\_\_  
\_\_\_\_\_

7 Hygrometer- \_\_\_\_\_  
\_\_\_\_\_

8 Radar- \_\_\_\_\_  
\_\_\_\_\_

9 Weather satellite- \_\_\_\_\_  
\_\_\_\_\_

10 Weather maps-  
\_\_\_\_\_  
\_\_\_\_\_