**AIR MASSES AND FRONTS (pg.490-494)**

Changes in \_\_\_**weather\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are caused by the movement and interaction of air masses.

An \_\_\_**air mass**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a large body of air where temperature and moisture content are similar throughout.

The \_\_**moisture \_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ content and \_\_\_**temperature**\_\_\_\_\_\_\_\_\_\_\_\_\_ of an air mass are determined by the areas \_\_\_\_\_\_**source regions**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (where it forms

**4 Types of masses (how do they form):**

Maritime (m) \_\_**forms over water; wet**\_\_ Continental (c): \_**forms over land; dry** \_\_\_\_\_\_\_\_\_\_

Tropical (T)\_\_**forms over tropic; warm**\_\_\_ Polar (P): \_**forms over the polar regions; cold**

**What weather will they bring?**

**North pacific: cool; wet; rain, snow, fog in summer. North Atlantic: cool, cloudy, rain, foggy in summer**

Maritime Polar (mP) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Maritime Tropical (mT): **summer: hot, humid, hurricanes; winter: mild cloudy weather** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Continental Polar (cP): \_\_**extremely cold, dry weather**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Continental Tropical (cT):\_**clear dry hot weather**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**dry; warm**

**cold dry**

**hot; humid, hurricanes, cloudy**

**mP**

**cool, wet, rain**

**mP**

**mT**

**mT**

**cT**

**cP**

**mT**

**mP**

1. Use the air mass symbols to label the chart to the right.
2. Also describe what kind of weather each air mass would bring.

Where do the masses Originate? Name the Air Mass, 2-letter symbol, and origin

|  |  |
| --- | --- |
| **Air Masses** | **Origins** |
| **Maritime Tropical (mT)** | Gulf of Mexico, Atlantic and Pacific Oceans |
| Continental Tropical (\_\_**cT**\_\_\_\_) | **Northern Mexico, Southwstern US** |
| Maritime Polar (\_\_\_**mP\_\_\_\_\_\_)** | **Northern Atlantic or Pacific** |
| Continental Polar(**cP**) | North Alaska and Canada |

Complete the Graphic Organizer. Illustrate the front by labeling **warm air mass, cold air mass, AND drawing arrows showing the movement of warm and cold air.**

**Warm Front:**

1. Forms: **warm air mass moves over cold(denser) air**
2. Moves:\_**gradually to replace cold air**
3. Brings: **drizzly rain followed by clear warm weather**
4. Symbol:



 

1. Illustration:

**Cold Front:**

1. Forms:\_**cold air moves under warm air pushing warm air up** \_\_\_\_
2. Moves:\_**quickly**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Brings:\_ **thunderstorms, heavy rain or snow**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Symbol: **Arrows face direction front is moving**

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1. Illustration: 

Illustration:

**Stationary Front:**

1. Forms:\_**cold air mass meets warm air mass with same force**
2. Moves:\_\_**very little movement**; no force
3. Brings:\_**days of cloudy wet weather**
4. Symbol:



1. Illustration:

**Occluded Front:**

1. Forms:\_**warm air is caught between 2 colder air masses**
2. Moves:\_**cold air moves under warm air; coldest air sinks warm air moves up**
3. Brings: **cool temperatures; large amounts of rain and snow**
4. Symbol: Icy and sunny
5. Illustration:

air mass. The second letter represents the temperature that is characteristic of the air mass.
