

What will the weather be tomorrow? Is rain on the way? Will sunny weather be moving in?

Weather moves from place to place. But where does it come from? Where does weather start?

Most weather comes from *air masses*. An air mass is a huge body of air. It covers a very large area. Places within this area have about the same temperature and humidity.

An air mass starts over the ocean or over a large body of land. The air that makes up an air mass stalls over the water or land. It stands still for several days or weeks. During this time, the land or water gives the air its temperature and humidity. The air mass then moves on.

The *humidity* of air masses depends on where they form.

- Air masses that form over the ocean are called *maritime* [MA rih time]. Maritime air is *moist*.

- Air masses that form over the land are called *continental*. Continental air is *dry*.

The *temperature* of air masses also depends on where they form.

- Air masses that form near the poles are called *polar*. Polar air is *cold*.

- Air masses that form near the tropics are called *tropical*. Tropical air is *warm*.

The name of an air mass has two parts:

(a) The first part tells us that it is either *maritime* or *continental*.

(b) The second part tells us that it is either *tropical* or *polar*.

For example, the name *continental tropical* tells us that the air mass formed over tropical land. The air would be *dry* and *warm*.

STUDYING AIR MASSES OVER NORTH AMERICA

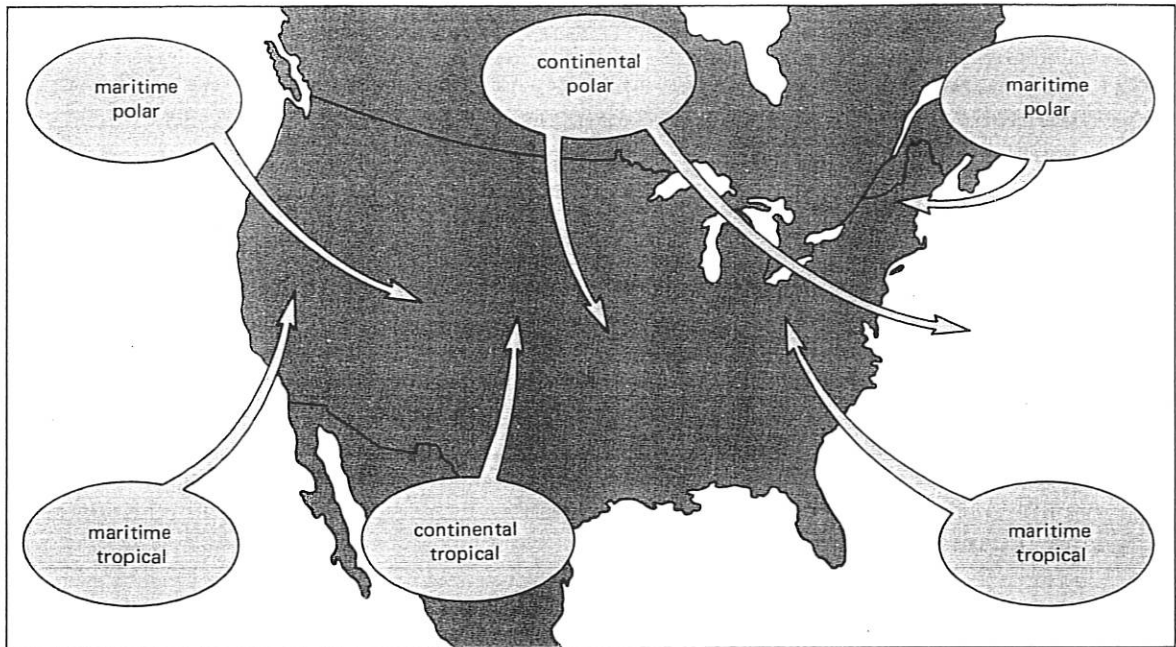


Figure A

The map (Figure A) shows the air masses that bring weather to North America. Study the map carefully. Then answer these questions.

1. Name the four kinds of air masses this map shows.

2. Which of these air masses move in from:

- a) the north? _____
- b) the south? _____
- c) the land? _____
- d) the ocean? _____

3. Which air mass brings

- a) cold and dry air? _____
- b) warm and dry air? _____

4. Which air masses bring

- a) cold and moist air? _____
- b) warm and moist air? _____

COMPLETING SENTENCES Complete the sentences with the choices below.

very large area
humidity
warm
land

moist
air masses
continental
temperature

water
cold
the same
maritime

1. Most weather comes from _____.
2. An air mass covers a _____.
3. The temperature and humidity in an air mass stay about _____.
4. An air mass starts over a large body of _____ or _____.
5. An air mass gets its _____ and _____ from the water or land it came from.
6. The word that means "water" is _____.
7. The word that means "land" is _____.
8. The temperature of air that comes from the tropics is very _____.
9. The temperature of air that comes from the poles is very _____.
10. Air that comes from over the ocean is very _____.

MATCHING Match the air masses on the left with the weather on the right.

- | | |
|-------------------------------|-------------------|
| 1. _____ maritime polar | a) dry and warm |
| 2. _____ continental tropical | b) moist and warm |
| 3. _____ continental polar | c) moist and cold |
| 4. _____ maritime tropical | d) dry and cold |