4.3 North American Weather Systems — *Activity*

How I Am Being Assessed _____

_____

_____

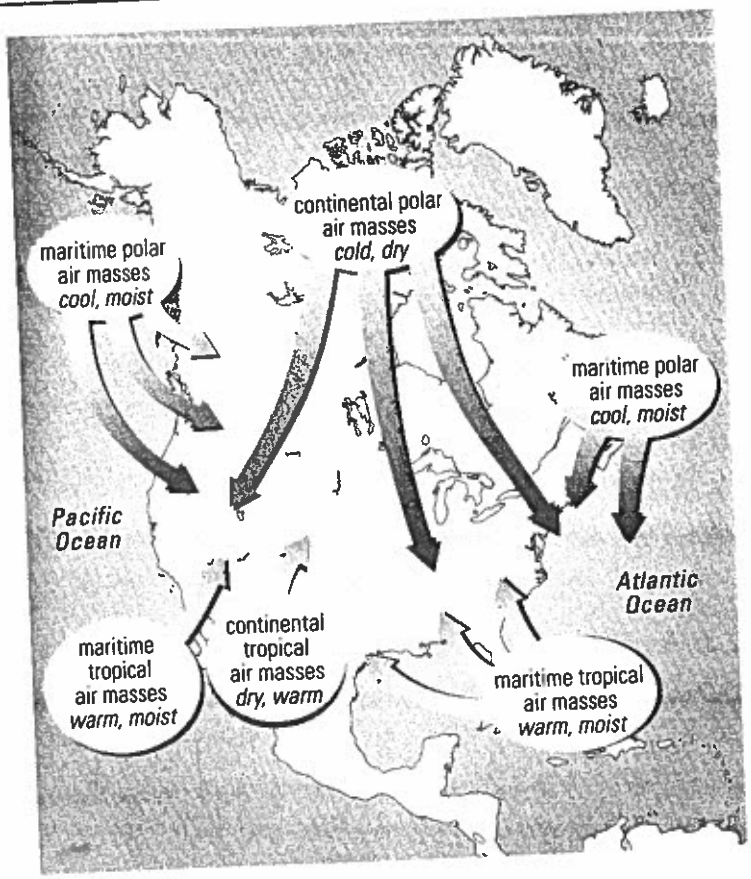

Figure 1
The air masses that affect weather in North America form in the cold north and warm south.

1. List the four air masses shown on the map above.

_____

_____

_____

_____

2. Match the air masses on the left with the description of the weather they bring on the right.

(a)	_____ maritime polar	**(i)**	dry and warm
(b)	_____ continental polar	**(ii)**	moist and warm
(c)	_____ maritime tropical	**(iii)**	moist and cold
(d)	_____ continental tropical	**(iv)**	dry and cold

3. Which of the air masses move in from

(a) the ocean? _____

(b) the land? _____

(c) the south? _____

(d) the north? _____

4. Place a T in front of the statement if it is true. Place an F in front of the statement if it is false. Rewrite any false statements so that they are true.

(a) _____ The boundary between air masses is called a front.

_____

(b) _____ Warm and cold air masses mix easily.

_____

(c) _____ In a warm front, warm air pushes against cold air.

_____

(d) _____ A stationary front occurs when two air masses pass by each other quickly.

_____

(e) _____ A cold front brings slow weather changes.

_____

(f) _____ Weather associated with an occluded front tends to be less extreme than with a warm or cold front.

_____

(g) _____ An air mass gets its humidity from the land it came from.

(h) _____ The temperature and humidity in an air mass are very different.

(i) _____ A maritime polar air mass is moist and warm.

(j) _____ Mid-latitude weather is easy to forecast.

Think about It

1. A passing warm front changes the air pressure. Does it increase or decrease the air pressure? Explain why.