

Unit 3: Weather and Climate Quiz

Topic: Weather map (A)

Name _____

1. Lines that join points of equal pressure on a weather map are called _____.

Use the weather station on the right to answer questions 2 - 10

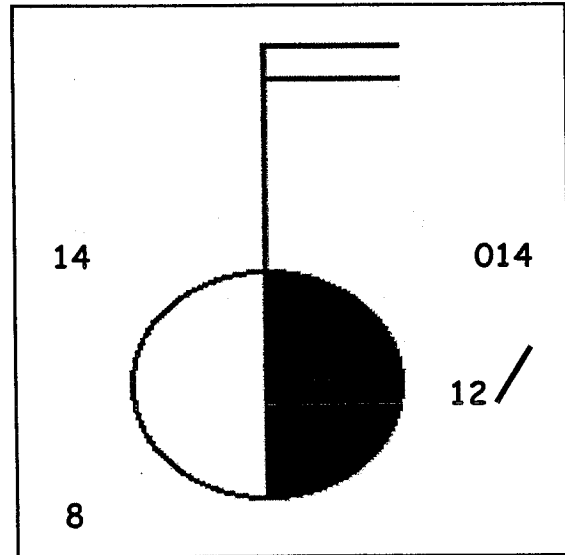
2. What is the air pressure in kPa?

3. What is the cloud cover?

4. What is the dew point?

5. What is the wind direction?

6. Is the air saturated?



7. What evidence do you see on the weather station that supports your answer for question 6?

8. Do you see the weather improving or deteriorating? Why? _____

9. What is the air pressure in millibars? _____

10. Name the wind blowing at this weather station. _____

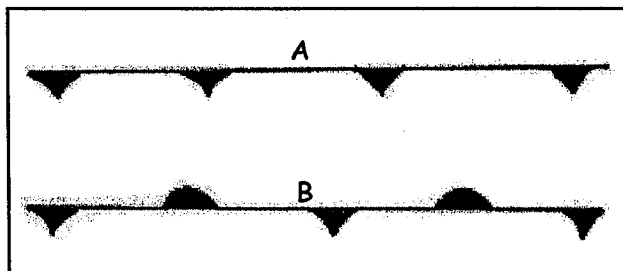
Topic: Weather map (B)

Name _____

1. Name the 2 fronts shown on the right.

A. _____

B. _____



Use the weather station on the right to answer questions 2 - 7

2. What is the wind direction?

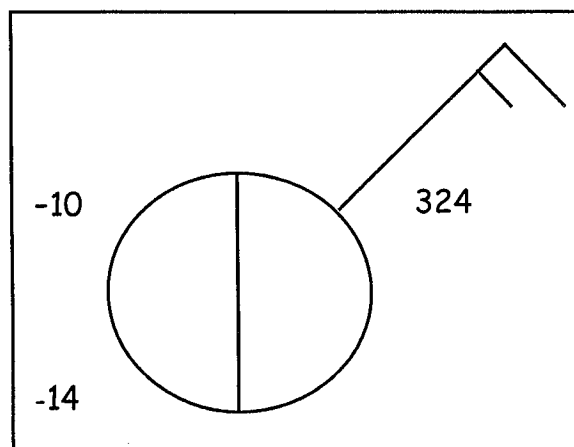
3. What is the cloud cover?

4. What is the air temperature?

5. What is the dew point?

6. What is the air pressure in kiloPascals?

7. Name the wind blowing at this station.



8. Lines that join areas of equal pressure are called _____.

9. A person who compiles information on weather is known as a _____.

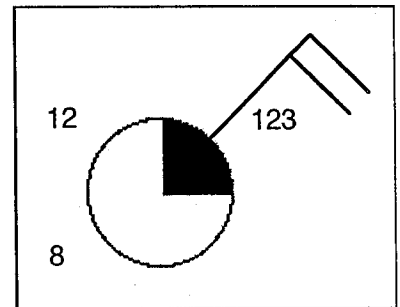
Topic: Weather station

Name _____

1. What is the average air pressure at sea level? _____ A pressure of 95 kPa is extremely low and could be found in _____.

Use the weather station on the right to answer questions 2 - 5

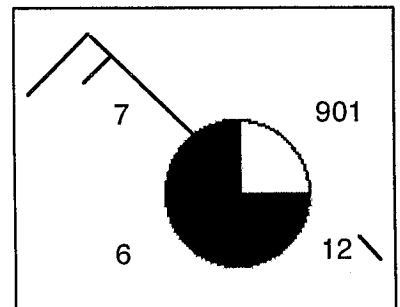
2. What is the air temperature? _____
3. What is the dew point? _____
4. What is the air pressure in mb? _____
5. What is the wind direction? _____



Use the weather station on the right to answer questions 6 - 11

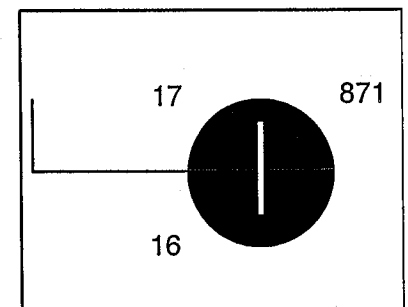
6. What is the air pressure in kPa? _____
 7. Is the air 100% saturated? _____
- How can you tell? _____

8. What is the wind direction? _____
9. What is the cloud cover? _____
10. What is the dew point? _____
11. What is the pressure tendency? _____



Use the weather station on the right to answer questions 12 - 16

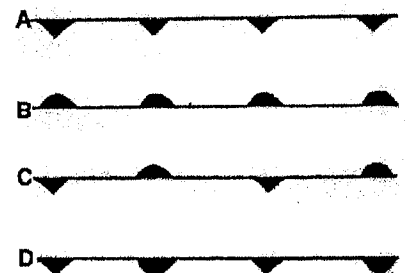
12. What is the wind speed? _____
13. What is the wind direction? _____
14. What is the air pressure in kPa? _____
15. What is the air pressure in mb? _____
16. What is the cloud cover? _____



17. What are isobars?

18. Name the 4 fronts shown on the right.

- A. _____
- B. _____
- C. _____
- D. _____



Topic: Weather Disturbances

Name _____

1. Lightning, thunder and hail are commonly associated with what type of cloud?

2. The leading edge of a cold arctic air mass from high latitudes is called a _____.
3. What are the 2 main ingredients required for the development of hurricanes?
 - a. _____
 - b. _____
4. In a hurricane, the area characterized by clear skies and no wind is referred to as the
_____.
5. Define storm surge.

6. Where in North America do most hurricanes occur?

7. What is a cyclone? _____
8. Tornadoes are the most violent of all storms with wind speeds reaching 500 kilometres per hour. They occur most often in the U.S. Great Plains and the Mississippi River Valley. Tornadoes are often generated along a weather front where a _____ air mass from Canada meets a _____ air mass from the Gulf of Mexico.
9. Why are temperature inversions so troublesome in large urban centres like Los Angeles and Toronto?

Topic: Weather disturbances

Name _____

1. Mid-latitude lows move from _____ to _____. They are also called mid-latitude _____.

2. A mid-latitude low begins when a plan front bulges northward and warm tropical air pushes into the polar air creating a northward moving warm front. This results in heavy cloud cover and _____ between the two fronts. As the cold front catches up to the warm front, the weather system dies out.

3. What causes thunder? _____

4. In North America, these violent storms are called hurricanes, in the China Sea they are called _____, and in the Indian Ocean they are called _____. To develop, they need both _____ and _____.

5. To be classified as a hurricane, wind speed must reach _____ kilometres per hour.

6. In addition to strong winds, a hurricane is destructive because

- a. _____
- b. _____
- c. _____

7. Tornadoes are narrow, funnel-shaped wind storms where wind speed can reach an estimated speed of _____ km. per hour. They occur, more than any other place on Earth , in the United States around _____.

In Canada, they occur mostly in the _____ and _____.

8. The three ingredients necessary to create a tornado are:

- a. _____
- b. _____
- c. _____

9. Tornado severity is measured on the Enhanced Fujita Scale, where the weakest tornadoes with wind speeds of 64-117 km. per hour are categorized as EF _____ and the strongest (greater than 117 km/h) are EF _____.

10. What is a 'temperature inversion'?

