

### Weather Unit Post-Assessment

1. Where is most of Earth's water located? Explain why this is a concern for us.
    - a. glaciers
    - b. lakes
    - c. oceans
    - d. rivers
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2. Above a continent a warm air mass slowly passes over a cold air mass. As the warm air begins to cool, clouds form. What will most likely happen next?
  - a. rain will fall
  - b. hurricanes will form
  - c. lightning will strike
  - d. hail will form

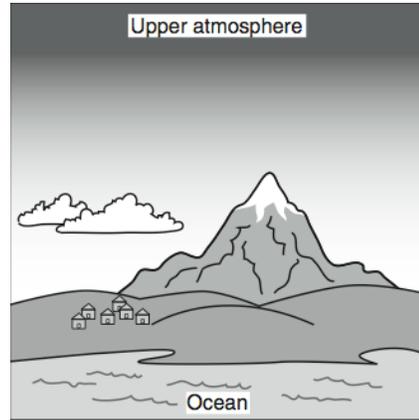
3. Which of the following is the most dense? Select an answer and draw a picture in the box below. Use words to explain your thinking.

- a. warm air
- b. cold air
- c. air that is still
- d. air that is moving



4. Which of the following is a major factor in the movement of weather?
  - a. humidity
  - b. wind
  - c. temperature
  - d. precipitation
5. What is at the center of our solar system?
  - a. a medium planet with an atmosphere
  - b. a star composed of carbon and nitrogen
  - c. a black hole that was once a star
  - d. a star composed of hydrogen and helium

6. The diagram to the right shows a landscape. Where in the diagram would the air pressure be the greatest?
- at the beach
  - on top of the mountain
  - at the bottom of the clouds
  - in the upper atmosphere



7. A city has a temperature of 70° F, with partly cloudy skies. Weather forecasters are predicting that the air pressure will rise and temperature will drop during the day. Which type of weather is most likely for this area in the late afternoon?
- rainy
  - sunny
  - snowing
  - hailing

8. The largest body in our solar system is
- earth
  - the sun
  - jupiter
  - the moon

9. Draw arrows on the diagram to the right to show the flow of air during a warm day. What causes this movement? Explain your thinking.

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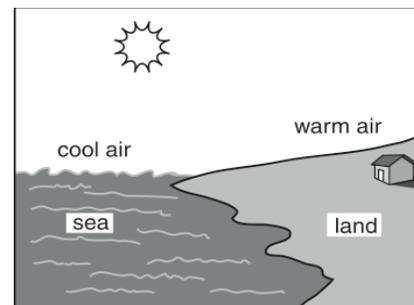
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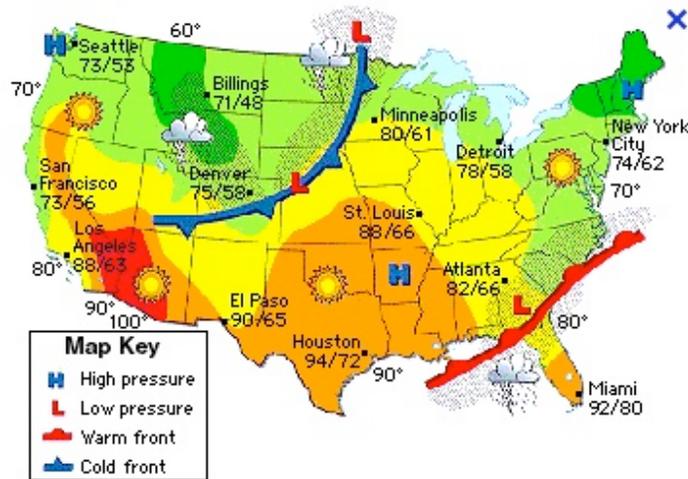
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10. Based on this map, which is the next city the cold front will pass through? What type of weather can Atlanta expect tomorrow?



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11. Vanessa thinks that Earth is the most unique planet. Do you agree with her? Why or why not? Give evidence to support your opinion.

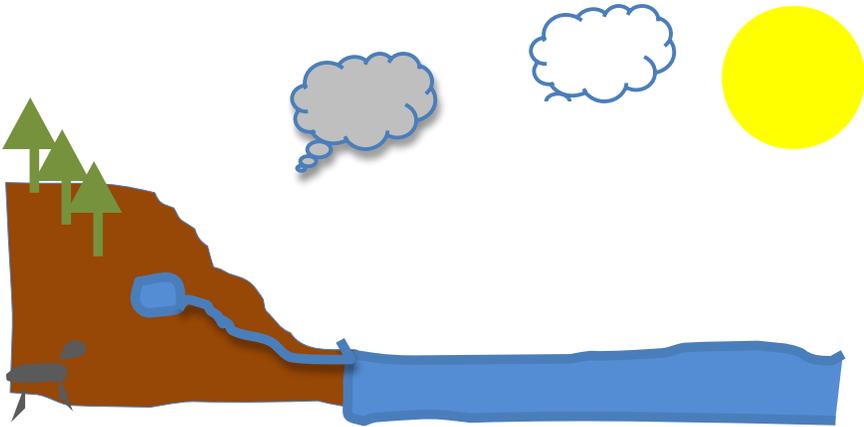
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12. Draw and label the water cycle. Explain what is happening in each step in the cycle.



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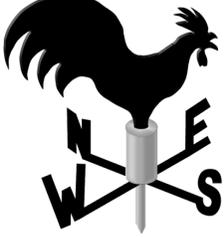
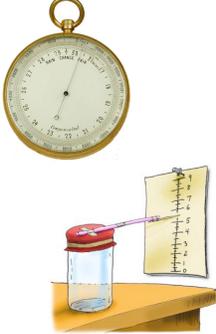
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13. How would you use these tools to predict weather?

Weather tool	Name of tool	What does it measure?	How does this help to predict weather?
			
			
			
			

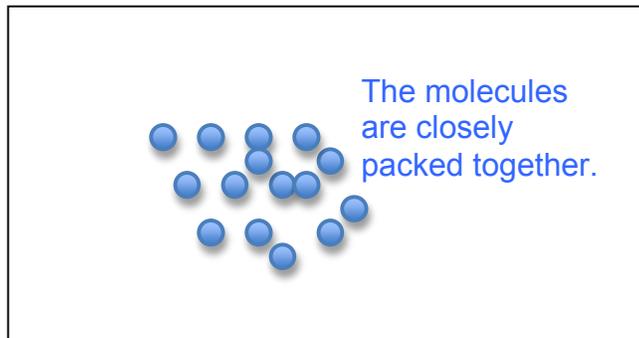
ANSWER KEY  
**Weather Unit Post-Assessment**

1. Where is most of Earth's water located? Explain why this is a concern for us.
  - a. glaciers
  - b. lakes
  - c. oceans
  - d. rivers

We should be concerned about the earth's water, because the drinkable water is a very small percentage of the water on Earth. While there is a lot of ocean water it is not drinkable due to high salinity content.

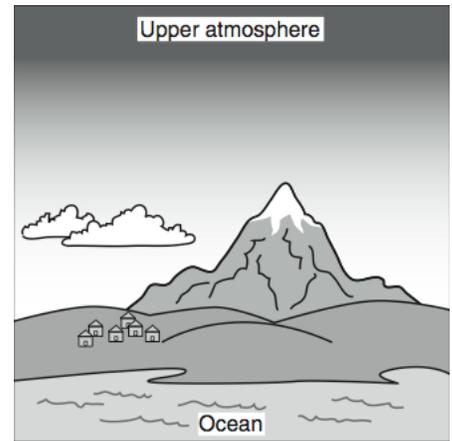
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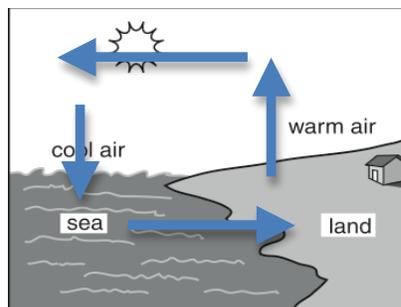


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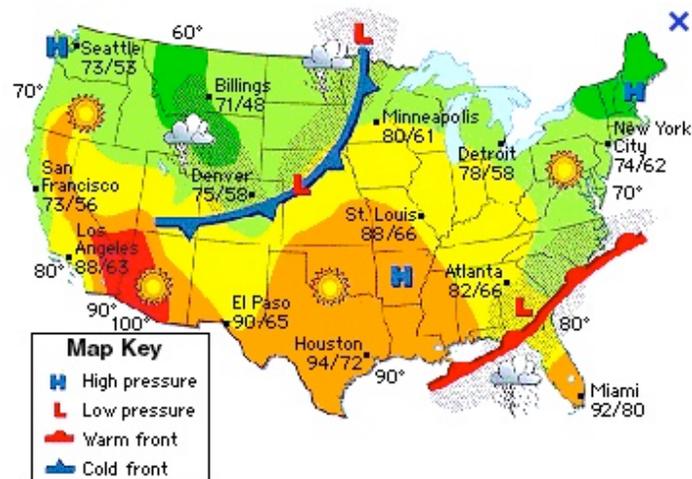
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8. The largest body in our solar system is
- earth
  - the sun
  - jupiter
  - the moon
9. Draw arrows to show the flow of air during a warm day.



What causes this movement? Explain your thinking.

Due to the uneven heating of the earth the land will be much warmer on a hot day. Because of this, the warm air over the land will rise causing the cool air from the ocean to rush in to fill its place. The warm air will eventually cool and fall back down creating a convection current.

10. Based on this map, which is the next city the cold front will pass through? What type of weather can Atlanta expect tomorrow?

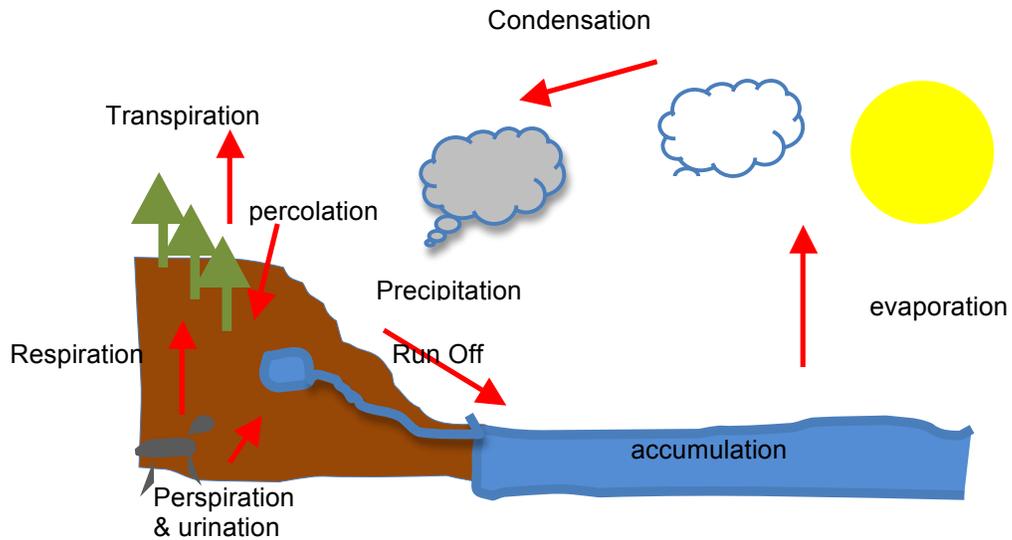


The next city, identified on this map, that the cold front will pass through is Minneapolis. Tomorrow, Atlanta can expect a warm rain and possible thunder showers.

11. Vanessa thinks that Earth is the most unique planet. Do you agree with her? Why or why not? Give evidence to support your opinion.

I think Vanessa is correct because the Earth has water and atmosphere, which makes weather possible. For example, the Earth is the only planet in our solar system that has the water cycle, which makes life possible on our planet.

12. Draw and label the water cycle. Explain what is happening in each step in the cycle.



The sun's energy heats up the water causing evaporation. Water molecules rise as water vapor. As the vapor rises, it cools and condenses into a cloud. This is condensation. When the cloud is full, water molecules fall to the ground as precipitation. When precipitation hits the earth, it can do several things. It can percolate into the ground. It can also accumulate in lakes, rivers, and creeks where it can run off into the ocean. Plants and animals can also consume the water, returning it to the cycle through transpiration (plant) and respiration/perspiration/urination (animals).

13. How would you use these tools to predict weather?

Weather tool	Name of tool	What does it measure?	How does this help to predict weather?
	wind vane	wind direction	It tells us the direction the weather is moving.
	rain gauge	the amount of rain collected	It lets us know how much precipitation there is .
	thermometer	the temperature	It tells us how hot or cool the air is. We can use it to look for patters and predict what type of precipitation one might expect.
	barometer	air pressure	It tells us if the air pressure is high or low which can help us predict changes in the weather.