

Weather Wind

Wind is an important part of weather. A muggy day may turn cooler if a wind blows from a cool area to the hot one. Thunderstorms occur when winds blow warm air into cool air. When the clouds from the two fronts collide, rain and lightening may form. Wind can also clear the skies or bring a mass of thunderclouds from great distances. What makes the wind blow? Wind is really just air that moves across the Earth. One reason that air moves is because of changes in temperature.

Wind is caused when the sun warms up the ground. Air above hot areas **expands**¹ and rises into the sky. Cool air is heavier than warm air. As a result, air from cooler areas flows in to replace the heated air. This process is called circulation.

When we feel a cold breeze, we are feeling the circulation of warm air rising and cool air rushing in to replace it. After the cold air falls closer to the ground, sunshine warms it up. Again the warmer air will rush up into the sky. Circulation continues in a cycle.

Wind usually brings weather along with it. If you remember this, you can predict what the weather will be in your area. First, find out the wind direction. You can do this using a weather vane. A long time ago, farmers used to put weather vanes on their barns so that they could use wind direction to predict rain. The arrow points in the direction that the wind is coming from. Next, you need to find a place that is “upwind from you.” This means that the wind is blowing from that city or place towards you. Next, you just need to find out what the weather is like in that place. Is it sunny? Are there thunderstorms? The wind will bring that weather your way shortly!

¹ **Expands**- increases in size

Name: _____

Date: _____

1. A good title for this passage would be:
 - a. Wind and Weather
 - b. All About Weather Vanes
 - c. How to Predict Rain
 - d. Circulation and Weather

2. Winds blowing can cause
 - a. the weather to change
 - b. constant humidity
 - c. your hair to grow quickly
 - d. circulation

3. To predict the weather, which should you do first?
 - a. Find a place that is upwind from you.
 - b. Look to see whether there are cumulus clouds in the sky.
 - c. Find out the wind's direction.
 - d. Find out what the weather is like upwind from you.

4. All of the following have to do with wind except
 - a. changes in temperature
 - b. circulation
 - c. grass growing on the ground
 - d. weather vanes

5. A cool breeze is caused by
 - a. rainfall
 - b. the ground
 - c. cool air rushing in to replace warm air that rises
 - d. a weather vane moving

6. Where might you expect to find this passage?

7. Why does cool air replace warm air closer to the ground?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

You can predict the weather _____ you know which way the wind is blowing and what the weather is like there.

- a. not
- b. if
- c. because
- d. whoever

9. Answer the following questions based on the sentence below.

I knew a thunderstorm was coming because wind was blowing it in from another area.

Who? I

(did) What? _____

How? _____

10. **Vocabulary Word:** expands: grows in size.

Use the vocabulary word in a sentence: _____

Teacher Guide and Answers

Passage Reading Level: Lexile 730

Featured Text Structure: Sequence – the writer provides an order of events or steps in a process

Passage Summary: Wind is an important part of and influence on weather. It's caused by hot air rising and being replaced by colder air. It can bring weather with it and can be used to predict the weather.

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 - a. **Wind and Weather**
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 - c. How to Predict Rain
 - d. Circulation and Weather
2. Winds blowing can cause
 - a. **the weather to change**
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3. To predict the weather, which should you do first?
 - a. Find a place that is upwind from you.
 - b. Look to see whether there are cumulus clouds in the sky.
 - c. **Find out the wind's direction.**
 - d. Find out what the weather is like upwind from you.
4. All of the following have to do with wind except
 - a. changes in temperature
 - b. circulation
 - c. **grass growing on the ground**
 - d. weather vanes
5. A cool breeze is caused by
 - a. rainfall
 - b. the ground
 - c. **cool air rushing in to replace warm air that rises**
 - d. a weather vane moving

6. Where might you expect to find this passage?

Suggested answer: You might expect to find this passage in a science book, newspaper, journal, or encyclopedia.

7. Why does cool air replace warm air closer to the ground?

Suggested answer: Cool air replaces warm air close to the ground because it is heavier than warm air.

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

You can predict the weather _____ you know which way the wind is blowing and what the weather is like there.

- a. not
- b. if**
- c. because
- d. whoever

9. Answer the following questions based on the sentence below.

I knew a thunderstorm was coming because wind was blowing it in from another area.

Who? I

(did) What? **knew a thunderstorm was coming**

How? **because wind was blowing it in from another area**

10. **Vocabulary Word:** expands: grows in size.

Use the vocabulary word in a sentence: answers may vary.