



**FOCUS:** Answering inference questions based on passages.

Continue



**DIRECTIONS:** Read the passage and the inference questions that follow. Mark the choice that best answers each question.

Continue

### Connections in the Wind



## Reading &gt; Lesson 3: Inference Questions &gt; Exercise 3.2

**DIRECTIONS:** Read the passage and the inference questions that follow. Mark the choice that best answers each question.

Hide Time

00:17:17

Continue



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Wind is also responsible for transporting harmful viruses, bacteria, fungi, pesticides, and toxic metals across the globe. Particles of reddish-brown soil and residue from pesticides banned in the United States blow from Africa's deserts and eroding farmlands as far as the state of Florida in the U.S. This spreading of impurities makes it difficult for the state to meet federal air pollution standards during the summer months.

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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

- 1 The author implies that wind is responsible for
- ☐ controlling temperature around the world
  - ☐ allowing early explorers to cross the oceans
  - ☐ causing increased droughts in some parts of the world
  - ☐ generating significant amounts of electrical power in many nations



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

2 What can be inferred about Brazil's rain forests?

- ☐ They are the principal supply of many of the region's agricultural oils.
- ☐ They have a large influence on the movement of winds.
- ☐ They are slowly being destroyed by airborne contaminants.
- ☐ They benefit from nutrients carried to them by winds.



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

3 What does the author suggest about dust storms in the Sahara Desert?

- ☐ They occur more frequently because of lower rainfall in vulnerable areas.
- ☐ They have become stronger because of changes in weather patterns.
- ☐ They have increased in frequency because of human activity.
- ☐ They occur throughout the year but are most frequent in summer.



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

4 It can be inferred that wind

- ☐ blows from Africa toward the United States
- ☐ is strongest in the Sahara Desert during the summer months
- ☐ causes more damage to deserts than overgrazing
- ☐ is the primary cause of soil erosion in Florida



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

- 5 It can be inferred that airborne soil particles
- ☐ play an important role in forming clouds and the conditions leading to rainfall
  - ☐ contribute significantly to Florida's air pollution problems
  - ☐ influence the speed of winds that carry them
  - ☐ are found in greatest quantities in winds closest to Earth's surface



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

- 6 The author suggests that fungi
- ☐ may be linked to outbreaks of red tides
  - ☐ may be responsible for the destruction of coral reefs
  - ☐ are contaminating shellfish
  - ☐ are not likely to be transported by wind



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

7 What does the author imply about the eruption of Mount Pinatubo?

- ☐ Its ashes helped to improve soil conditions.
- ☐ It disrupted normal patterns of wind circulation.
- ☐ Its ashes are still circling the globe.
- ☐ It changed scientific theories about global warming.



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Hide Time 00:10:08

Back

1 of 8

Next

Review

Continue

8 What does the author imply about pollutants that humans introduce into the environment?

- ☐ They all eventually find their way into the world's oceans.
- ☐ They can remain there for long periods and be transported from place to place by winds.
- ☐ They have altered natural processes on Earth in ways that cannot be reversed.
- ☐ They can affect organisms in the biosphere in ways that are impossible to predict.



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There is also mixed news. Particles from volcanic eruptions ride the winds, circle the globe, and change Earth's temperature for a while. Emissions from the 1991 eruption of Mount Pinatubo in the Philippines cooled Earth slightly for three years, temporarily masking signs of global warming. And volcanic ash, like the blowing desert dust, adds valuable trace minerals to the soil where it settles.

The lesson is simple: Things do not just "blow away"--nothing simply disappears, because everything is connected. Wind acts as part of the planet's circulatory system for heat, moisture, plant nutrients, soil, and the long-lived pollutants we put into the air. This movement of particles from one place to another by way of wind currents

into the atmosphere.

Wind is also responsible for transporting harmful viruses, bacteria, fungi, pesticides, and toxic metals across the globe. Particles of reddish-brown soil and residue from pesticides banned in the United States blow from Africa's deserts and eroding farmlands as far as the state of Florida in the U.S. This spreading of impurities makes it difficult for the state to meet federal air pollution standards during the summer months.

And there's even more bad news for the environment. Some types of fungi in this dust may play a role in degrading or killing coral reefs in the Florida Keys and in the Caribbean. Scientists are also studying possible links between contaminated African dust and a sharp rise in rates of asthma in the Caribbean region since 1973. Particles of iron-rich dust from Africa that enhance the productivity of algae have also been linked to outbreaks of toxic algae blooms--referred to as red tides--in Florida's coastal waters. This is an imminent danger, because people who eat shellfish contaminated by a toxin produced in red tides can become paralyzed or even die.

...system for heat, moisture, plant nutrients, soil, and the long-lived pollutants we put into the air. This movement of particles from one place to another by way of wind currents is a natural phenomenon, but when we disturb the soil and leave it unprotected, we hasten and intensify this natural process. An important factor in climate through its influence on global air-circulation patterns, wind affects climate, and climate, in turn, is crucial in determining what kinds of plant and animal life are found in the biosphere.