

Tornado Scientists



Tornadoes form when strong winds spin. Wind is invisible, but we can see tornadoes because the spinning wind picks up water, dust and debris. The spinning wind forms a funnel that connects thunderstorm clouds with the ground.

When a tornado is close, watch out. They can spin over 200 miles per hour and cause a lot of damage. As they move across the land, they can easily pick up cars, trucks and even houses, and then throw them very far. It is important to find a safe place to take shelter if a tornado gets close.

A safe place could be a basement or the lowest floor, depending on where you are. If you are in a home without a basement, try to find a first-floor closet or bathroom without windows in the middle of your house. You should curl up like a ball and cover your head and neck with your hands. Stay in a safe place until the tornado passes.

But there are some people who actually want to get close to tornadoes. They are scientists who want to learn more about tornadoes. One of the best ways to do this is to get as close as possible to these twisters. They use special equipment and instruments to measure what is happening in and around a tornado.

One special instrument these scientists use is called a tornado probe. They are about six inches tall and look like short, orange construction cones. Inside the tornado probe, there are sensors to measure wind speed, temperature, pressure and direction. Some even have cameras, so they can see and understand what it's like to be in a tornado.

To be able to get these measurements, the scientists and the probes have to get very close to tornadoes. Scientists will try to guess where the tornado will go next. Then they drive to that location and put down the probes. If they do not guess correctly, they pick up their instruments and try another spot. If they are right, the tornado will go near or even right over the instrument. Then they take all of the measurements from the probe and use them to predict where future tornadoes will form and travel.

Tornadoes are extremely dangerous, and the scientists who study them up-close are bold and brave. Their work is very important and has saved lives by giving people enough warning and time to get out of the way of a destructive tornado.

Name: _____ Date: _____

1. What is a tornado?

- A** a sensor that measures wind speed, temperature, pressure, and direction
- B** a first-floor room without windows in the middle of a house
- C** a person who studies winds and shares his or her findings with others
- D** spinning wind that forms a funnel and can cause a lot of damage

2. What sequence of events is described in the passage?

- A** the steps scientists take to get measurements from tornado probes
- B** the steps involved in the formation of a tornado
- C** the steps people take to build tornado probes
- D** the steps people should take if their house is destroyed by a tornado

3. Tornadoes are dangerous.

What evidence from the passage supports this statement?

- A** Some scientists use special equipment and instruments to measure what is happening in and around a tornado.
- B** As tornadoes move across the land, they can easily pick up cars, trucks and even houses, and then throw them very far.
- C** If scientists do not guess correctly where a tornado will go, then they pick up their instruments and try another spot.
- D** Tornado probes are about six inches tall and look like short, orange construction cones.

4. What can information about one tornado tell scientists?

- A** Information about one tornado can tell scientists how old a tornado probe is.
- B** Information about one tornado can tell scientists where another tornado may happen.
- C** Information about one tornado can tell scientists how many people took shelter from it in their basement.
- D** Information about one tornado can tell scientists whether closets or bathrooms are better for taking shelter in.

5. What is this passage mainly about?

- A wind speed, temperature, pressure, and direction
- B cars, trucks, and houses that have been picked up by tornadoes
- C tornadoes and people who study them
- D the formation of a tornado's funnel

6. Read the following sentences: "Inside the tornado **probe**, there are sensors to measure wind speed, temperature, pressure and direction. Some even have cameras, so they can see and understand what it's like to be in a tornado."

What does the word **probe** mean?

- A something that gathers information
- B a strong wind that spins in a funnel
- C a place where people go for shelter
- D a prediction about where something will happen

7. Choose the answer that best completes the sentence below.

Most people take shelter during a tornado; _____, some scientists try to get close to tornadoes.

- A moreover
- B in particular
- C in contrast
- D therefore

8. What should you do during a tornado?

9. How do scientists use the measurements they get from tornado probes?

10. How can the work of scientists who want to get close to tornadoes help people who want to take shelter from tornadoes? Support your answer with evidence from the passage.

Teacher Guide & Answers

Passage Reading Level: Lexile 940

1. What is a tornado?

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8. What should you do during a tornado?

Suggested answer: Answers may vary in degree of detail. Students may give a general response, stating that you should take shelter in a safe place. They may also get specific, advising retreat to a basement or an inner room without windows.

9. How do scientists use the measurements they get from tornado probes?

Suggested answer: Scientists use the measurements from tornado probes to predict where future tornadoes will form and travel.

10. How can the work of scientists who want to get close to tornadoes help people who want to take shelter from tornadoes? Support your answer with evidence from the passage.

Suggested answer: Answers may vary, as long as they are supported by the passage. Students may respond that the information gathered by tornado scientists allows them to figure out where tornadoes may form and travel. By sharing this information with others, these scientists help people make it to safety before a tornado strikes.