



ZAC NEWTON INVESTIGATES

Wild Weather

Zac and friends learn about tornadoes and weather through visits with Vilhelm and Jacob Bjerknes, John Park Finley, Ted Fujita, and Evangelista Torricelli.

What did you learn?

QUESTIONS

- Which country has fjords?
 - Belize
 - Tanzania
 - Laos
 - Norway
- Vilhelm and Jacob Bjerknes figured out how cyclones do what?
 - Form
 - Grow
 - Die out
 - All the aboves
- Who made the first successful tornado forecast in recorded history?
 - Christian Doppler and Evangelista Torricelli
 - Vilhelm and Jacob Bjerknes
 - James Pollard Espy and William Charles Redfield
 - Ernest Fawbush and Robert Miller
- Tetsuya "Ted" Fujita introduced the Fujita scale for classifying what?
 - Hurricanes
 - Typhoons
 - Tornadoes
 - Sunlight
- What does *condense* mean?
- What is a tornado simulator?

TRUE OR FALSE?

- | | |
|--|---|
| _____ 1. The winds inside a twister can swirl at over 500 miles (800 kilometers) per hour. | _____ 4. The closer together sound waves are, the lower the pitch of the sound. |
| _____ 2. Water vapor is water in the form of a gas. | _____ 5. William Charles Redfield was nicknamed the Storm King. |
| _____ 3. A wall cloud is a low, dark, heavy cloud that forms beneath a mesocyclone. | _____ 6. A selfie is an instrument for measuring atmospheric pressure. |

ANSWERS

- 1. d. Norway.** According to page 28, we know that, "We learned about fjords in geography. Norway has tons of them." So, the correct answer is D.
- 2. d. All of the above.** According to page 32, we know that the Vilhelm and Jacob Bjerknes "figured out how these cyclones form, grow, and die out." So, the correct answer is D.
- 3. d. Ernest Fawbush and Robert Miller.** According to page 93, we know that Ernest Fawbush and Robert Miller were U.S. Air Force weather officers who, on March 25, 1948, made the first successful tornado forecast in recorded history. So, the correct answer is D.
- 4. c. Tornadoes.** According to page 93, we know that Tetsuya "Ted" Fujita "introduced the Fujita scale for classifying tornadoes." So, the correct answer is C.
- According to page 21, we know that, "To condense means to change from a gas into a liquid or solid."
- According to page 49, we know that a tornado simulator is "a machine that makes a miniature whirlwind, like a model of a tornado."

TRUE OR FALSE? ANSWERS

- 1. False.** According to page 9, we know that, "The winds inside a twister can swirl at over 300 miles per hour. That's almost 500 kilometers per hour ... " So, the correct answer is False.
- 2. True.** According to page 20, we know that, "Water vapor is water in the form of a gas." So, the correct answer is True.
- 3. True.** According to page 34, we know that a wall cloud is "a low, dark, heavy cloud that forms beneath the mesocyclone." So, the correct answer is True.
- 4. False.** According to page 60, we know that, "Sound travels through the air in waves, something like waves in the ocean. The closer together the waves are, the higher the pitch of the sound." So, the correct answer is False.
- 5. False.** According to page 92, we know that, "James Pollard Espy (1785-1860), nicknamed the Storm King, was an American meteorologist ... " So, the correct answer is False.
- 6. False.** According to page 94, we know that, "barometer: an instrument for measuring atmospheric pressure." So, the correct answer is False.