



Lightning - Review Questions

1. How much energy does the AVERAGE lightning bolt carry?
 - a. 30 thousand volts/100 million amps
 - b. 300 million volts/30,000 amps
 - c. 1 thousand volts/30 thousand amps
 - d. 30 million volts/100 thousand amps
 - e. Lightning is too powerful to measure accurately

2. How wide is the average lightning bolt?
 - a. About the width of a tire.
 - b. About the width of a coffee cup.
 - c. About the width of a quarter.
 - d. About the width of a pine needle.
 - e. About the width of a human hair.

3. Which of the following cities in the United States claims the title "Lightning Capital of the World"
 - a. Tampa Bay,
 - b. Houston, Texas
 - c. Atlanta, Georgia
 - d. None of the above

4. Which of the following states in the U.S. receives the most lightning strikes on an average annual basis?
 - a. Texas
 - b. Florida
 - c. Oklahoma
 - d. New Mexico
 - e. Louisiana

5. What are your odds of being struck by lightning?
 - a. 1:600,000
 - b. 1:750,000
 - c. 1:2,000,000
 - d. 1:3,000,000
 - e. No single answer can be applied to everyone.

6. When a lightning bolt strikes the ground, the next bolt, on average, will...
 - a. not strike for another 30 seconds.
 - b. go off inside the cloud.
 - c. strike within 2 to 3 miles of its predecessor.
 - d. All of the above.

7. Thunder...
 - a. travels about one mile every 5 seconds, or about one kilometer every 3 seconds.
 - b. travels about one mile, or about one and one half kilometers, every second.
 - c. can easily be heard from a storm more than 10 miles away.

8. Heat Lightning:
 - a. is nothing more than lightning from a storm that is too far away for thunder to be heard.
 - b. is a discharge of electromagnetic plasma caused by ionization between the troposphere and the stratosphere.
 - c. occurs when differential heating between the stratosphere and the troposphere allows electromagnetic energy to buildup and discharge.
 - d. only occurs in Summer.

9. Lightning is the first thunderstorm hazard to arrive, and the last to leave. (TRUE, FALSE)

10. You are planning a large outdoor gathering (e.g. a high school graduation). When should you devise a lightning safety plan?
 - a. No lightning plan is necessary...if it strikes, it is an act of God.
 - b. The day of the event.
 - c. Wait and see if thunderstorms are in the area.
 - d. It should be an integral part of the planning stage.
 - e. None of the above.

11. What should your lightning safety plan take into account?
 - a. The latest weather forecast.
 - b. How many people will have to find shelter.
 - c. Where they will evacuate to.
 - d. All of the above.

12. Which of the following can you depend on to protect you from lightning?
 - a. A picnic shelter.
 - b. A convertible automobile.
 - c. A baseball dugout.
 - d. A small cluster of trees.
 - e. None of the above

13. You can safely walk outside in a thunderstorm so long as your shoes have rubber soles. (TRUE, FALSE)

14. Which of the following factors will increase your chance of being struck by lightning?
- Time of day
 - Time of year
 - Geographical location
 - All of the above.
15. A person who has been struck by lightning...
- has very little chance of survival.
 - should not be touched for at least 60 seconds because his/her electrified body
 - should be administered CPR if they are unconscious and not breathing.
 - are affected by both their electrified body and have little chance of survival.
16. You can be struck by lightning even if you are indoors. (TRUE, FALSE)
17. You observe a lightning flash and then hear thunder 10 seconds later. How far away was the lightning bolt.
- 2 miles
 - 3 miles
 - 5 miles
 - 10 miles
18. The sound of thunder from a lightning bolt one mile away will typically have a _____ sound.
- sharp cracking
 - soft rumbling
 - low rumbling
 - dull booming
19. Using the 30/30 rule for lightning safety, 30 seconds between the flash of lightning and sound of thunder indicates the bolt was _____ miles away.
- 3
 - 6
 - 30
 - 60
20. Positively charged lightning strikes are very dangerous as they originate in the _____ portion of the thunderstorm cloud and can strike _____.
- lower / tall objects
 - upper / up to 10 miles away
 - middle / the upper part of the cloud
 - downdraft / people on cell phones