



Lightning strikes over the
Mediterranean Sea off the
coast of Greece.

 Track 9

1 **E**very second of every day, all over the world, there are more than 100 **lightning bolts** striking the earth. That's about ten million lightning bolts in one day!

Lightning **amazes** us, but it can also **frighten** us. We have good reason to be afraid of lightning. Every year, about 100 people in the United States and Canada die from lightning, and another 300 are **injured**. It is strange that of all the people who die from lightning, 84 percent are men. Lightning is the main cause of forest fires; it starts more than 9,000 fires each year.

2 Lightning is electricity inside a cloud. Scientists do not know exactly what makes this electricity. But they know that the electricity inside a cloud can be as much as 100 million volts.¹ From this extremely strong electricity, a lightning bolt, like a streak of bright light, comes down from the sky. Its temperature can reach 50,000 degrees Fahrenheit (27,760 degrees Celsius) within a few millionths of a second. That's almost five times the temperature on the sun's surface.

3 A lightning bolt is very quick. It can move at a speed of 87,000 miles (140,000 kilometers) per second. A rocket traveling at this speed would reach the moon in 2.5 seconds. With the lightning bolt, we usually hear thunder, which is the sound of hot air **exploding**. Lightning and thunder happen at exactly the same time, but we see lightning first because light travels almost a million times faster than sound.

¹ *volts*: a unit used to measure the force of an electric current

4 Lightning often strikes tall buildings. However, many buildings have lightning rods to **protect** them from lightning. When lightning strikes, the electricity goes safely down the metal rod to the ground. Benjamin Franklin, the American statesman,² invented the lightning rod in 1750. That is why buildings like the Empire State Building in New York City are safe. Lightning may hit this building as many as 25 times a year.

find **shelter**, go to the lowest point on the ground. If you are outside, remember that trees **attract** lightning, especially tall trees. Never go under a tall tree that stands alone. If you are in a field, drop to your knees, bend forward, and put your hands on your knees. Do not lie down because the wet ground can carry lightning. Stay away from a lake, an ocean, or any other water. Don't touch or go near anything metal, such as a metal fence, golf clubs, or bicycles, because metal attracts lightning very quickly. Don't use a telephone except in an emergency.

5 They say that lightning never hits the same place twice, but this is not true. One man, Roy Sullivan, was hit by lightning seven different times in his life. He was injured each time but did not die. He died in 1983, but not from lightning. He killed himself because he loved a woman, but she didn't love him!

6 If you see thunder and lightning coming, here are some things you can do to protect yourself. Go inside a house, get into a car, or go under a bridge. If you cannot

² *statesman*: an important and experienced politician

VOCABULARY

VOCABULARY IN CONTEXT

A Complete these sentences with the words in the box.

amaze exploding injured protect
attract frighten lightning bolts shelter

1. There are millions of _____ every day.
2. A sky with lightning looks powerful, maybe even beautiful, and it might _____ you.
3. A big storm with thunder and lightning can _____ you because it is dangerous.
4. When lightning strikes people, they can be _____ or die.
5. Thunder sounds as if fireworks are _____.
6. A lightning rod is used to _____ buildings from lightning strikes.
7. In a storm, you should find _____ from the bad weather.
8. Tall buildings _____ lightning strikes.

VOCABULARY BUILDING

Complete these sentences with the words in the boxes.

amaze (verb) amazement (noun) amazing (adjective)

1. What an _____ story!
2. He looked at us in _____.

frighten (verb) fright (noun) frightening (adjective)

3. I had a _____ when I saw him unexpectedly.
4. We had a _____ experience on the plane.

attract (verb) attraction (noun) attractive (adjective)

5. There was an _____ woman at the party last night.
6. The castle is the main _____ of the old city.

