

ПРЕЗЕНТАЦИЯ
ПРОЕКТНО-
ИССЛЕДОВАТЕЛЬСКОЙ
РАБОТЫ
ПОТАНИНОЙ ЕЛИЗАВЕТЫ

МБОУ НОВОВОРОНЕЖСКАЯ СОШ
№1

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МАЙ 2020





«МОЛНИИ И ВСЁ О НИХ»
«LIGHTNINGS AND ALL ABOUT THEM»



INTRODUCTION

Since childhood, I have loved rainy weather, especially thunderstorms. It's nice to sit on the balcony with a cup of hot tea and listen to the thunder and rain. This led me to become interested in the subject of lightning. What is it? How does this happen? How dangerous is it? How do I calculate where lightning struck?

So I want to tell you this. Enjoy your viewing!



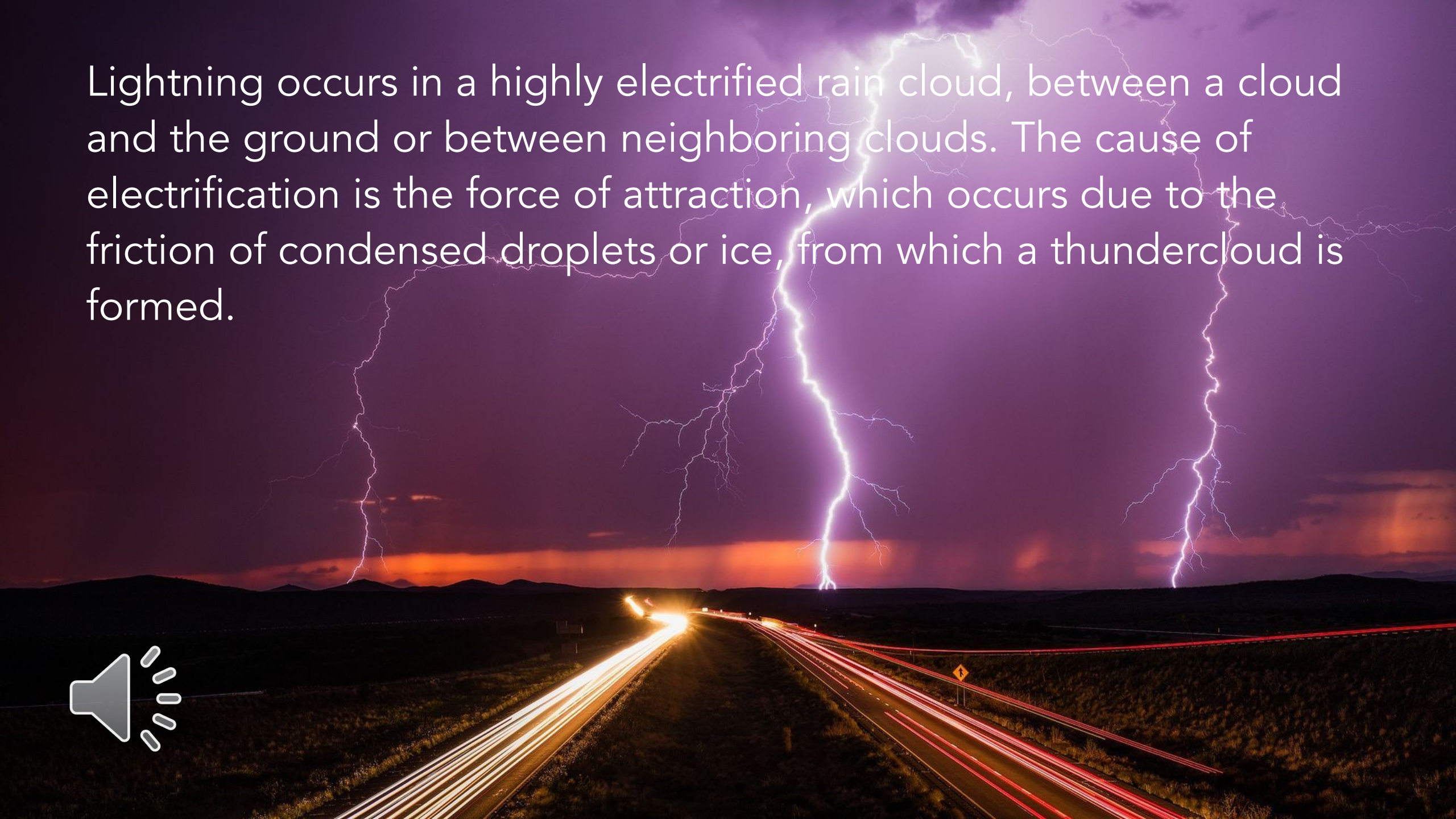
WHAT IS LIGHTNING?



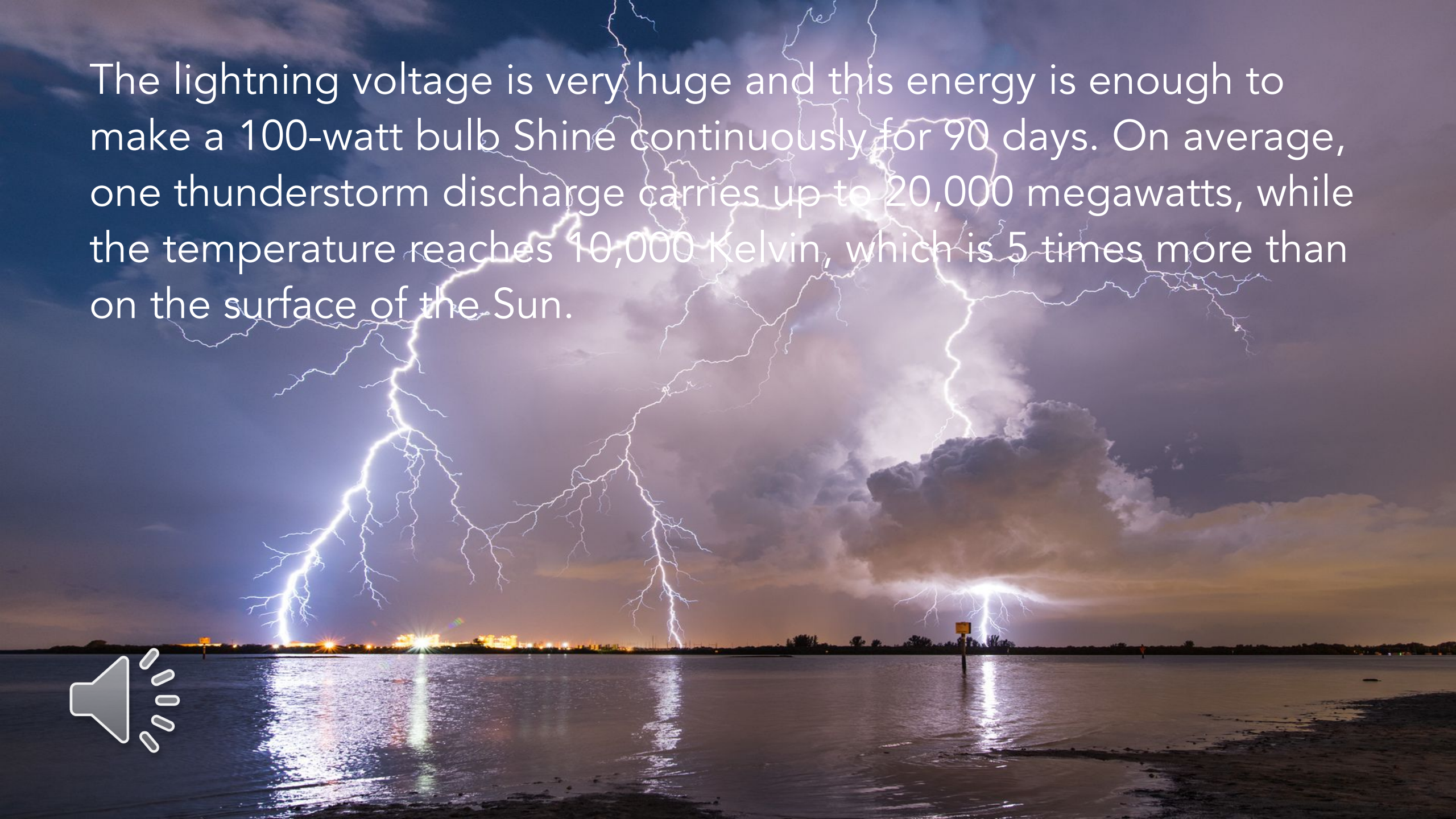
Lightning is an electrical discharge of 10-20 thousand Amperes with a potential difference of up to a billion Volts that occurs between the earth's surface and rain clouds or only between clouds during a thunderstorm.



Lightning occurs in a highly electrified rain cloud, between a cloud and the ground or between neighboring clouds. The cause of electrification is the force of attraction, which occurs due to the friction of condensed droplets or ice, from which a thundercloud is formed.



The lightning voltage is very huge and this energy is enough to make a 100-watt bulb shine continuously for 90 days. On average, one thunderstorm discharge carries up to 20,000 megawatts, while the temperature reaches 10,000 Kelvin, which is 5 times more than on the surface of the Sun.



TYPES OF LIGHTNING



linear (cloud-to-ground,
ground-to-cloud,
cloud-to-cloud)



horizontal or flat



ribbon



bead



stormy



volumetric



ball



volcanic



THE CALCULATION OF THE DISTANCE FROM THE LIGHT

By counting the number of seconds after a lightning flash and multiplying it by 340, we can calculate the distance from lightning to the thunder



CONCLUSION

Now you know how and why lightning appears. I want to say that this phenomenon is dangerous for all living things around us, including ourselves. During a thunderstorm, you can not be in the water, stand in the middle of a field and hide under a single tree.





QUIZ



WHAT IS LIGHTING?

- 1) flash of light
- 2) an electrical discharge of 10-20 thousand Amperes
- 3) sun ray

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WHAT TYPE OF LIGHTNING DOESN'T EXIST?

- 1) stormy
- 2) ball
- 3) square

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- 1) stormy
- 2) ball
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HOW LONG WILL THE LIGHTNING POWER LAST FOR A 100-WATT LIGHT BULB?

- 1) 90 days
- 2) 45 days
- 3) 180 days

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SOURCES

1. <https://remont220.ru/osnovy-elektrotehniki/909-molniya-priroda-elektrichestva/>
2. <https://yandex.ru/images/search?from=tabbar&text=молнии%20фото>
3. <https://calculat.ru/rasstoyanie-do-molnii>

THANK YOU FOR YOU ATTENTION!

