

atmosphere. *Why does a highly colored sunset predict a storm?* Because it shows that the air contains a great amount of moisture.

What is electricity? It is that mode of motion which is manifested by the peculiar phenomena of attraction and repulsion. It is best understood by its effects. *How is the electric light produced?* In two principal ways, viz., by incandescence or glow and by the electric arc. The electricity is produced either from a powerful battery or from a magneto-electric machine. In the first method the electricity passes through platinum or carbon, and heats it until it glows. In the second case, two points, usually of carbon, are separated a short distance, and the passage of the electricity over this distance, carrying with it heated particles of carbon, gives the light. *What is the cause of lightning?* It is caused by electricity passing from the clouds to the earth. The earth and the clouds become oppositely charged, and the tension of the electricity overcomes the resistance of the air between the earth and the clouds, and passes through it. *Why does it sometimes take a zigzag course?* So as to pass where there is the least resistance. *What is heat lightning?* It is an unsteady glow of lightning seen near the horizon, and is simply the reflection of lightning so distant from us as to be invisible. *Why is it dangerous to stand near a tree during a thunder storm?* Because the tree, being a high object and a good conductor of electricity, is very liable to form the conductor for the lightning. *Why is it dangerous to be near a fire during a thunder storm?* Because smoke and flame are conductors of electricity. *Where is the safest place during a thunder storm?* In the center of a dry room, away from all conductors of electricity. *What is the cause of thunder?* Thunder is caused by the sudden rush of air into the vacuum which the electricity, as it darts with inconceivable velocity, leaves behind it. *Why is thunder sometimes loud and continuous, and at*

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