

ELEMENTARY SCIENCE SECTION

The Lightning



DO you know why you see the lightning flash before you hear the thunder? The reason is this: light travels faster than sound.

At the place where the lightning is, the flash and the thunder occur at the same time. But light travels at the enormous speed of more than 186,000 miles a second, while sounds travel through the air at the rate of 1090 feet a second.

Consequently, although the flash and the thunder occur together in the clouds, the light travels so much faster than the sound that you see the flash some seconds before you hear the crash of the thunder.

It is easy to tell how far away from you is the flash of the lightning. Simply count the seconds that pass between seeing the lightning and hearing the thunder. Since

sound travels through the air a little more than 1000 feet a second, and there are 5280 feet in a mile, you can figure that it travels a mile in about five seconds.

So, if you divide by five the number of seconds between the flash and the thunder, the result will tell you how many miles away the lightning must be.

Many people are afraid of thunder and lightning. Remember that the thunder does not hurt you. It is the lightning which is dangerous. During a severe thunder storm when there is much lightning, the best thing for you to do is to wear rubber shoes. Lie flat on the ground if you are in a field. Don't stay near tall trees, nor under them.

There is a superstitious belief in the Philippines that a mirror in a house should be covered during thunder and lightning, or it will attract lightning.

This superstition may have originated from the following incident: An old couple lived in a small house. No tall trees were near their house, and so they had no protection from the lightning. One day lightning struck the house and burned it. Some ignorant people thought that a mirror in the house had attracted the lightning.

That was not true. The house, being the highest thing in the vicinity, was struck by lightning because it was not surrounded by any taller objects, such as tall trees. The mirror did not attract the lightning.