

Wonders of Nature

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IN this short article we shall attempt to explain in easy language a few of the things of nature which we see each day, but whose cause and effect sometimes puzzle us.

Why Is the Sky Blue?

The air which surrounds our earth is filled with countless millions of tiny specks of dust. Sunlight is pure white light, but is made up of rays of red, orange, yellow, green, blue, indigo, violet. The specks of solid matter floating in the air catch and absorb some of the rays which make up white light, and throw off others. The rays which have been absorbed form the combination of color which makes the sky seem blue.

Colors of the Sunset

For the same reason given above, we get all the beautiful colors of the sunset. The different shades are caused by the angle at which the sunlight strikes the specks of matter floating in the earth's atmosphere. When the sun is setting, the light has farther to travel to reach the eye of the observer and strikes the air belt in a slanting direction. It thus encounters more solid matter, specks of dust, smoke, water vapor, etc. Some of these absorb one kind of ray, some others, and in this way all the variety of colors observed in the sunset are produced.

Rainbows

The same reason is the cause of the forming of the rainbow. It is caused by the rays of sun shining through drops of water in the air and being reflected back to where we are

on the earth. The seven colors named before are the colors of rays of pure sunlight, and the drops of water separate these colors so that we can see each one.

Falling Stars

What we usually call a "falling star" is not a star at all. It is a meteor, that is, a wandering piece of iron or stone which has been attracted by the gravity of the earth from outside space, and which falls toward the earth. It is heated white hot by friction with the earth's atmosphere and almost always is burned up before it reaches the earth.

Earthquakes

Volcanic eruptions produce some earthquakes but the more severe ones are due to shifting of the earth's crust. As the earth cools, its crust sags downward gently, cracks form, stresses collect, and then a rupture and a slip follow. These stresses may be formed by the escape of gases. Thus we have an earthquake.

Fog

Fog is heavy mist, that is, tiny drops of water floating in the air. Fogs on or near the sea are nothing more than clouds come to earth and spread out more than when in the sky. Fogs come when the upper air acts as a blanket and keeps the misty air down until the wind comes and blows it away.

Rain

When the watery vapor in the air forms drops, these fall to the earth on account of their own weight. Then we have rain.