

Literary Readings – Microorganisms

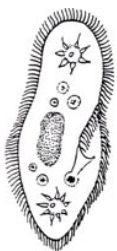
All microorganisms are living things, or **organisms**. Microorganisms may be **single-celled**, *any living thing that has only one cell – the smallest unit of life*. Some microorganisms are multicellular, having more than one cell. They require food, air, water, ways to dispose of waste and an environment in which they can live. Some microorganisms are producers, living things that make their own food from simple substances using sunlight, as plants do. Some microorganisms eat other organisms to get their food. Most microorganisms do not cause disease and many are helpful. There are many different kinds of microorganisms. Scientists serve and classify microorganisms just as they do plants and animals. These classifications are determined by the microorganism’s shape, structure, how it gets food, where it lives and how it moves. The microorganisms we will study in this unit include bacteria, fungi, and protozoa. Let’s look at the characteristics of each.

Bacteria are *microscopic, single-celled organisms that exist all around you and inside you*. Although they can cause sickness and disease, they are very important to life on Earth. We depend on bacteria to help in the digestion of food, for plant growth, and to help us make foods and medicines. Bacteria are an important part of the soil. They are able to capture some nutrients that plants cannot. When living things die, bacteria play a very important role as **decomposers**, *bacteria and fungi feeding on and breaking down plant and animal matter*. Without these decomposers, the bodies of all organisms that have ever lived would still remain. This would be messy! When bacteria break down the dead organisms, they release substances that can be used by other organisms in the ecosystem.

Fungi are *organisms that are neither plant nor animal, yet have characteristics of both*. Fungi absorb food from whatever source they are growing on. A common fungus is a mushroom. It looks like a plant, but is not green. Mushrooms cannot make their own food and must live on a food source. Some are poisonous, and only an expert can identify them. Another fungus, yeast, is used to make bread rise and give it flavor. A fungus causes athlete’s foot and some types of fungus rot wood in homes. Fungi also like warm, moist places to grow. A good way to prevent fungus is to keep things, like your toes, dry.



Fungi



Paramecium

Protozoans are *microscopic organisms that often live in ponds*. They move through the water with tiny hair-like arms. The arms are located all around the sack-like body of the protozoa and wave back and forth to move the protozoa through the water. Some protozoa are producers like plants. Others must eat smaller things like bacteria or molds. Protozoa are an important food source for many pond creatures. Some protozoa are harmful to people. You may have heard that it is not a good idea to drink water from a stream. Streams sometimes contain a protozoan called *Giardia* that can make you sick.