



Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Microorganisms - Lesson 1

diseases	dead	single-celled	microbes	decay
feed	Earth	down	microbiology	oxygen
microscope	germs	animal	spherical	size

Some living organisms cannot be seen with the naked eye and can only be seen with a powerful \_\_\_\_\_ . These organisms are called microorganisms or \_\_\_\_\_. There are five types of microorganisms: fungi, bacteria, viruses, algae, and protozoa. Most microorganisms are essential and beneficial to life on Earth. Others, however, can be harmful to plants, animals, and humans. These can cause illnesses and even deadly diseases and are called \_\_\_\_\_ or pathogens. They can exist everywhere, including the soil, air, and inside or on the surface of living things. The study of these microorganisms is called \_\_\_\_\_ .

Fungi are responsible for making dead things \_\_\_\_\_ , or rot. Most fungi feed through microscopic threads called hyphae. These threads dig into a food source and release chemicals that break \_\_\_\_\_ the food. Then the fungi digest it and use it as nutrients. Fungi feed on \_\_\_\_\_ animals, bird droppings, manure, and fruit. They eat almost anything that was once alive. They are what you see when bread is moldy.

Bacteria are single-celled \_\_\_\_\_ , spiral, or rod-shaped organisms. They are a few micrometers long. Bacteria can be found everywhere. They are in the soil, air, water, plants, animals, and even humans. There are good bacteria and bad bacteria. Bacteria reproduce very quickly and can form billions of bacteria from a single bacterium in just 24 hours. You might be surprised to know that there are more bacteria in your mouth than people on \_\_\_\_\_ .

Viruses are \_\_\_\_\_ microorganisms. They can only survive inside the cells of other living organisms. Once they are inside other living organisms, they multiply and cause \_\_\_\_\_ such as the common cold, influenza (flu), COVID-19, and many others. Viruses are so small that 500 million of them could fit on the head of a pin.

Algae are organisms that are found all over the world. They are important because they make much of the Earth's \_\_\_\_\_. There are about 27,000 different species or types of algae. They are most common in water but can be found in soil and on leaves, wood, and stones. They can even live on animals such as turtles and polar bears. Algae can be green, blue, red, or brown and vary greatly in \_\_\_\_\_. Some are microorganisms, but others, such as kelp, grow to be 60 meters long.

The word protozoa means "little \_\_\_\_\_." This is because the protozoa hunt and gather other microbes as food and act like tiny animals. Protozoa mainly \_\_\_\_\_ on bacteria, but they also eat other protozoa and other organic matter. Protozoa have many different shapes, but they are all made up of a jellylike material called cytoplasm. Protozoa are found all over the world and can live on land and in water. Some protozoans are parasites, which means they live inside the bodies of animals, including humans.