Essential Questions and Answers:

What are beneficial microorganisms?

Bacteria, fungus and protists are all examples of helpful microorganisms.

How are microorganisms helpful?

Microorganisms help breakdown food in digestion while others (fungi) serve as decomposers to help breakdown decaying plant and animal organisms. Penicillin is an important antibiotic formed from fungal bacteria. Plantlike microorganisms (phytoplankton and algae) found in the ocean provide valuable oxygen to our atmosphere and are important food source to larger organisms. Some bacteria produce methane gas (fuel) during respiration. Other types of bacteria help the environment by converting dangerous chemicals to harmless by-products, ex. oil spills.

What are harmful microorganisms?

Bacteria, fungus, and protists are examples of harmful microorganisms.

How are microorganisms harmful?

Some microorganisms can cause infectious diseases. Certain types of bacteria can cause staph and strep infections while others are known to cause food poisoning. Fungus can cause damage to healthy food crops and cause skin conditions such as ringworm. Microscopic worms can lodge in the intestines of muscles causing serious diseases. Protozoa (animal-like protists) carried by mosquitoes cause malaria, and the Salmonella bacteria lives in chicken and other animals causing food poisoning.
**Essential Vocabulary:**

microorganism

harmful

beneficial

disease

bacteria

protists

germs

microbe