# **Biology 9: Unit 2 Understanding Bacteria Video** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_

## *Student Objectives*

• Discover how bacterial reproduction occurs.

## *Vocabulary*

**culture medium**

*Definition****:*** A nutrient system for the artificial cultivation of cells or organisms, especially bacteria

*Context:* Many types of bacteria can be grown on a culture medium.

**enzyme**

*Definition****:*** Any of various complex proteins produced by living cells that bring about or accelerate reactions (such as the digestion of food) at body temperatures without being permanently altered

*Context****:*** For a microbe to consume food from its environment, it must make enzymes that break down the food into usable molecules.

**microbiology**

*Definition****:*** A branch of biology focused on microscopic forms of life

*Context****:*** Advances in microbiology have helped identify many types of bacteria.

**microorganism**

*Definition****:*** An organism of microscopic or ultramicroscopic size

*Context****:*** Microorganisms range from bacteria that help us digest food to the pathogens that make us sick.

**mutate**

*Definition****:*** To change the physical relation of chromosomes or the genetic sequence in an organism

*Context****:*** Bacteria mutate to adapt to new conditions in their environment.

**pathogen**

*Definition****:*** An organism that causes disease

*Context****:*** Pathogens such as salmonella and streptococcus may cause great suffering.

***Video Questions***

1. How does life on Earth depend on bacteria?
2. How do bacteria adapt to new environments?
3. How has the widespread use of antibiotics contributed to new health-care problems?
4. How do bacteria differ from other single-celled organisms?
5. Why is genetic research an important part of understanding bacteria or any microorganism?
6. How can we protect ourselves daily from bacteria?
7. Explain two things you learned from the video.