

## Bacteria, Protist, Fungi, and Viruses

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### Lesson Overview

In this lesson students will understand the processes, structures and functions of living organisms that enable them to survive, reproduce and carry out the basic functions of life. Students should have prior knowledge of cells and the difference between unicellular and multicellular organisms.

### Standards Addressed

- SC 2005      7-2.3 Compare body shapes of bacteria and body structures use for food gathering and locomotion.
- SC 2014      7.L.3A.2 Analyze and interpret data from observations to describe different types of cells and classify cells as plant, animal, protest, or bacteria.

### Disciplinary Literacy Best Practices

- KWL
- Jigsaw

### Lesson Plan

Time Required: Three 60-minute class periods

Disciplinary Vocabulary: protists, euglena, virus, protein coat, paramecium, bacteria, cocci, bacillus, spirillum, germs, fungi, flagellum, cilia, pseudopod , oral groove, vesicles, anal pore, vacuole, nucleus, autotroph, heterotroph, DNA, host cell, eye spot, chloroplast

Materials Needed:

- Resource materials (textbook, student notebooks, internet, etc.)
- Copies of Who's the source of the infection Activity (<http://school.discoveryeducation.com/curriculumcenter/viruses/pdf/activity2.pdf>)
- Chart paper, color tools, and pencils

Assessment: Group Presentations

## Engage

- Students will complete the “Know” section of the class KWL chart by identifying the first word that comes to mind when they hear the word “germ”.
- Student groups will dialogue to identify one question they want to know about germs. One student from each group will record their question in the “Want to Know” section of the class KWL chart.

## Explore

- Students will complete the activity from the Discovery Channel School’s Curriculum Center: Who’s the source of the infection? (<http://school.discoveryeducation.com/curriculumcenter/viruses/pdf/activity2.pdf>)
- The teacher will assign students to Jigsaw groups for further study.
  1. Bacteria round
  2. Paramecium
  3. Bacteria rod
  4. Plant-like protist
  5. Fungus-like protist
  6. Amoeba
  7. Euglena
  8. Fungi
  9. Bacteria spiral
  10. Virus
- Each student jigsaw group will complete the following tasks for their assigned topic, using resources available such as their textbook and internet sources. They will record the information in their student science notebook.
  1. Draw, label, and color their organism
  2. Locate and write down 3 or more diseases that their organism can cause.
  3. Locate and write down 5 facts about their organism.
  4. Locate and write down 1 advantage and 1 disadvantage of their organism
  5. Locate and write down the way the organism moves and gathers food.
- Each student jigsaw group will organize and display information gathered on a chart paper.

## Explain

- Jigsaw groups will present their findings to the class.
- At the completion of group presentations, the class will be directed to discuss with their groups and express their findings to the following questions:
  - What connections are there between all the organisms?
  - How might you classify the organisms?
  - What connections did you notice between this lesson and any other lesson?
- Each group will add one statement to the class KWL chart indicating what they learned from the lesson.

## Teacher Biographical Information

Sheri Sims is a National Board Certified teacher. In her 27 years of teaching, she has taught 1<sup>st</sup> grade, 5<sup>th</sup>, and 7<sup>th</sup> grade. She has been teaching 7<sup>th</sup> grade science for 10 years at East Clarendon Middle/High School, Clarendon 3, Turbeville, SC.