

Topic: Introductory Bacteria and Virus Worksheet

Summary: Students answer introductory questions about bacteria and viruses.

Goals & Objectives: Students will be able to determine the difference between bacteria, viruses and animal/plant cells. Students will be able to remember important facts about viruses and bacteria.

Standards: CA 1c. *Students know* how prokaryotic cells, eukaryotic cells (including those from plants and animals), and viruses differ in complexity and general structure.

Time Length: 30 minutes

Materials:

- Class textbook
- Photocopied worksheets
- Pencils or pens

Procedures:

1. Tell the students which section they are to use in the textbook. Students are then going to read the section and answer the questions on the worksheet.

Accommodations: Students with an IEP can take the handout home if they need extra time or only answer questions 1-19.

Evaluation:

Each question is worth 1/2 point with the Venn diagram worth 6 points. The assignment is worth a total of 20 points.

Introduction to Bacteria and Viruses

1. What is the official name of the smallest and simplest cells? _____
2. What is the modern version of these cells called? _____
3. Bacteria are single-cell or multi-cellular organisms? _____

4-16. Fill in the following table with Yes or No answers.

Questions	Eukaryote	Prokaryote	Virus
Is made out of a cell or cells?			
Has a nucleus?			
Is considered living?			
Can move on its own?			
Can reproduce or replicate?			
Has DNA?			
Has specialized structures or internal compartments?			
May have a cell wall?			
Has membrane-bound organelles?			
Has ribosomes?			
Has cytoplasm?			
Has chloroplast?			
Has mitochondrion?			

17. How do bacteria reproduce? _____
18. What are the two classification kingdoms for prokaryotes? _____ & _____
19. What do the chromosomes look like in bacteria? _____

20. What do bacteria use to move? _____

21. What do bacteria have surrounding their cell membrane? _____

22-27. Draw and title the three different shapes of bacteria

28. What two things are typical viruses made of? _____ & _____

29. What part of the virus binds the receptor proteins on a cell? _____

30. Viruses are general or highly specific to the cell that they can infect? _____

31. What is the main way that viruses replicate? _____

32. What two types of nucleic acids can viruses have? _____ or _____

33. What type of virus invades bacteria? _____

34. What is the membrane called that surrounds a capsid? _____

35. Compare and contrast bacteria and viruses by filling in the Venn diagram below.

