



**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.

**NGSS Standards:** None

**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 do the chromosomes look like in bacteria? \_\_\_\_\_

19. What do bacteria use to move? \_\_\_\_\_

20. What do bacteria have surrounding their cell membrane? \_\_\_\_\_

21. What type of virus invades bacteria? \_\_\_\_\_

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

22	23	24
25	26	27

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

