

1. What is a virus?

Viruses are particles of nucleic acid, protein, and in some cases, lipids.

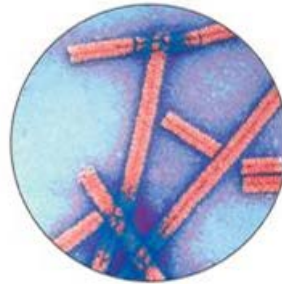
2. How do viruses reproduce?

Viruses can reproduce only by infecting living cells.

3. Identify the type of virus:



Bacteriophage



Tobacco mosaic virus

4. Complete the sentence: A capsid is the virus's protein coat.

5. True or false? Because viruses must bind precisely to proteins on the cell surface and then use a host's genetic system, most viruses are not specific to the cells they infect. False (they are highly specific to the cells they infect)

6. In what type of infection (lytic or lysogenic) does the bacteriophage enters a cell, makes copies of itself, and causes the cell to burst? lytic

7. In what type of infection (lytic or lysogenic) does the bacteriophage enters a cell and replicate with bacterium for many generations? lysogenic

8. How is called the bacteriophage DNA inserted into a bacterial chromosome? prophage

9. How are retroviruses different from other viruses?

Retroviruses contain RNA as their genetic information. (Their genetic information is copied backward—that is, from RNA to DNA instead of from DNA to RNA.)

10. Viruses are at the borderline of living and non living things.

a) Give two characteristics of viruses that make them different from real living things.

1. They are not made up of cells.
2. They are not able to live independently.

b) Give three characteristics of viruses that make them similar from real living things.

1. Viruses reproduce.
2. They regulate gene expression.
3. They evolve.