Draw a diagram of how a virus can attach, infect, and lyse a cell. Make sure to include the following terms in your diagram: projections, release new virus, entry into cell, genetic material, reproduce new virus, attachment.

Draw a Venn diagram comparing viruses and cells.
Guided Questions

1. Human immunodeficiency virus (HIV) infects an individual’s immune cells. This individual can be asymptomatic for an extended amount of time. Describe what is happening and whether this virus is considered lytic or lysogenic.

2. Ebola is caused by a virus that is spread through bodily fluids. Symptoms of this deadly disease include fever, fatigue, vomiting, abdominal pain, and unexplained bleeding. These symptoms occur within 2 to 21 days of exposure. State whether this virus is considered lytic or lysogenic and why.

3. How might an antiviral drug affect a virus?

4. Can antibiotics be used to treat both viruses and bacteria? Explain your answer.

5. Give an example of a situation in which ecosystems benefit from microorganisms.

6. Give an example of a situation in which ecosystems are negatively impacted by microorganisms.