Viral Replication

The LYSOGENIC CYCLE

1 → 2 → 3 → 4 → 1

The LYtic CYCLE

1 → 2 → 3 → 4 → 5
1. What kinds of cells do bacteriophage viruses attack?

2. **On your diagram**, briefly describe the steps of the lytic and lysogenic cycles in your own words.

3. **Label** the following in your diagrams in addition to the descriptions:
   a. Bacteriophage
   b. Host cell
   c. Viral nucleic acid (DNA or RNA)
   d. Host cell DNA

4. Label the prophage in your lysogenic cycle. Is the prophage harmful to the cell?

5. Describe one main difference between the Lytic and Lysogenic cycles?

6. a) What can cause a virus in the lysogenic cycle to enter the lytic cycle?

   b) Draw an arrow on your diagrams to show where this “switch” may occur.

7. Viruses reproduce by invading host cells and taking over their means of protein synthesis. DNA and RNA viruses differ in the way they accomplish this. (Text 489-90)
   a. In what two ways might a DNA virus take over a cell?
   
   b. In what way might an RNA virus take over a cell?
Viral Replication

1. Cut out the diagrams.
2. Place them in the correct order to demonstrate the lytic & lysogenic cycles for a bacteriophage.
3. Describe in your own words what is happening at each stage of the cycle.

The Lysogenic Cycle

The Lytic Cycle