

## STUDY GUIDE: Virus and Bacterial Genetics

### KEY TERMS

#### VIRUSES

capsid  
nucleic acid core  
lytic cycle  
lysogenic cycle

bacteriophage  
vectors  
provirus  
retrovirus

viriod  
prion  
restriction enzyme

#### BACTERIA

bacterial chromosome  
transformation

transduction  
conjugation

plasmids  
transposons

### QUESTIONS

1. Using a diagram describe the lytic and lysogenic cycles of viral replication. Use the following terms in your description: virulent, temperate, lysogenic cells, lytic cycle, provirus and vegetative virus.
2. Describe the bacterial chromosome. How does it differ from a eukaryotic chromosome?
3. Describe the nature of bacterial plasmids and discuss their role in recombinant DNA studies.
4. Using a diagram describe the process of transduction by bacteriophages and tell of the implications and uses of this process.