STUDY GUIDE: Virus and Bacterial Genetics

KEY TERMS

VIRUSES

capsid  bacteriophage  viriod
nucleic acid core  vectors  prion
lytic cycle  provirus  restriction enzyme
lysogenic cycle  retrovirus

BACTERIA

bacterial chromosome  transduction  plasmids
transformation  conjugation  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.