

Viruses, Bacteria & Immunity Review Sheet

Viruses

1. Explain the structure of viruses.
2. What is the outer coating called?
3. Are viruses alive? Explain.
4. Explain what happens in the lytic cycle.
5. Explain what happens in the lysogenic cycle.
6. What is a provirus?
7. What is the difference between DNA and RNA viruses?
8. Explain what happens with a retrovirus.
9. List five examples of diseases caused by viruses.
10. What does it mean if a cell lyses?

Bacteria

1. Are bacteria prokaryotic or eukaryotic? What does this tell you about their cellular structure?
2. Explain the structure of bacteria.
3. What is an endospore?
4. How do bacteria reproduce?
5. Name the three nutritional types seen in bacteria and explain what each means in terms of obtaining energy.
6. What are parasitic bacteria?
7. What are saprophytic bacteria?
8. Name the three types of ancient bacteria that we discussed.
9. Through what process do ancient bacteria obtain energy?
10. Explain why bacteria are important.
11. Name five diseases caused by bacteria.

Disease

1. What is a pathogen?
2. What does it mean if a disease is infectious?
3. What is the "Germ Theory of Disease"? Who formulated it? What process is named for him and what does the process do?
4. Name the five methods through which bacterial diseases can be transmitted.
5. What is the difference between endotoxins and exotoxins?

Immunity

1. What is the first line of defense against pathogens?
2. Explain what happens during the inflammatory response.
3. What is meant by an "immune response"?
4. What is an antigen?
5. What are lymphocytes? What are the two types of lymphocytes?

6. What are antibodies? How is their shape beneficial to us?
7. What are autoimmune diseases? Give two examples.
8. What is active immunity?
9. What are vaccines?
10. What is passive immunity?
11. What is antibiotic resistance?
12. How can viral diseases be treated?
13. What is AIDS?
14. What is the virus that causes AIDS? How is it transmitted?
15. What treatments are available for someone with AIDS?