
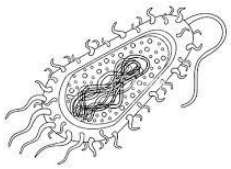


Name: _____

Bacteria, Viruses and The Immune System

Test Date: _____

Class website:
http://sd41blogs.ca/hemingwaya/

My Questions:

Viruses/Bacteria/Immune System:

Vocabulary words: (for viruses) ***Instructions:*** **Create a hand drawn, coloured visual dictionary of all of the following words**				
Virus	Capsid	bacteriophage	lytic cycle	lysogenic cycle
prophage	retrovirus	Eubacteria	Archaebacteria	Conjugation
Binary fission	Spore Formation	Pathogen	Vaccine	Antibiotics
Non Specific Defense	Specific Defense	Active Immunity	Passive Immunity	Herd immunity

Viruses:

Learning Goals	**Learning Goal unpacked in detail**	**Resources You learn….You choose**
A7. I can describe the characteristics of a virus that are living and non-living		**CREATE NOTES FROM TEXTBOOK** p. p.478-484 **HANDOUTS/NOTES FROM CLASS:** **MAKE NOTES on VIDEOS & WEBSITES on class website** **Video:** Viruses by Bozeman Science
A8. I can describe the basic structure and function of a virus	Including: ○ antigens ○ membranous envelope ○ protein capsid ○ nucleic acid core (DNA or RNA)	**CREATE NOTES FROM TEXTBOOK** p. 478- 484 **HANDOUTS/NOTES FROM CLASS:** Virus worksheet **MAKE NOTES on VIDEOS & WEBSITES on class website**

		Video: Viruses by Bozeman Science **Video:** I'm a virus! rap
A9. I can compare and contrast the <u>lytic and lysogenic cycles</u> of viruses.	List the similarities and differences between the two cycles	**CREATE NOTES FROM TEXTBOOK** p. 478- 484 **HANDOUTS/NOTES FROM CLASS:** • Diagram of lysogenic and lytic cycles with colour coding **MAKE NOTES on VIDEOS & WEBSITES on class website** **Video:** Viral Replication by Bozeman Science
A10. I can describe the <u>effect of viruses on organisms</u>	immunity vaccines herd immunity reducing the spread of viral diseases (eg. H1N1, avian flu, HIV, Ebola, STIs)	**CREATE NOTES FROM TEXTBOOK** p. 478- 484 **HANDOUTS/NOTES FROM CLASS:** **MAKE NOTES on VIDEOS & WEBSITES on class website**
BACTERIA:		
A11. I can classify bacteria and identify the characteristics that unify them	• Prokaryotes • Eubacteria • Archaebacteria	**CREATE NOTES FROM TEXTBOOK** p. 471- 477
A12. I can identify the diversity within Kingdom Eubacteria and Archaebacteria and their beneficial roles in the environment.	• Shapes • Cell walls • Movement • Growth and reproduction • Importance of bacteria	**HANDOUTS/NOTES FROM CLASS:**
A13. I can evaluate the effectiveness of various antibiotics, disinfectants, or antiseptics on bacterial cultures	• Bacteria Lab	**MAKE NOTES on VIDEOS & WEBSITES on class website** **Textbook pages: 485-487**

Immune System Learning Goals/Test Checklist

☐ Recognize the various types of pathogens, and examples of each.

☐ Understand means by which diseases are transmitted with examples

☐ Identify components of the first line of defense and how each help the immune system

☐ Identify the 2 immune responses of the second line of defense

☐ Identify the aspects of the innate immune response and the cells/action that are involved

☐ Understand the specificity between antigen and antibody and how that relates to acquired immune response

☐ Identify and describe the roles of various cells of the acquired immune response

☐ Understand how various components of the immune system works together to fight off pathogens

☐ Give examples of ways to reduce the spread of viral diseases

☐ Describe how a vaccine provides immunity

☐ Describe how the immune system is involved with allergies

☐ Describe why the HIV virus is problematic for the human immune system and distinguish it from AIDS

☐ Distinguish between antibiotics, disinfectants and antiseptics

☐ Explain how bacteria mutate to become resistant to antibiotics

☐ Describe various means to help keep your immune system running optimally