

KEY CONCEPT Living in a clean environment and building immunity help s to keep a per son healthy.
 VOCABULARY antiseptic antibiotic resistance
 vaccine MAIN IDEA: Many method s are u sed to control pathogen s. Use the concept map to take note s on the different technologies that have been developed to destroy pathogens. Tech nology to fight

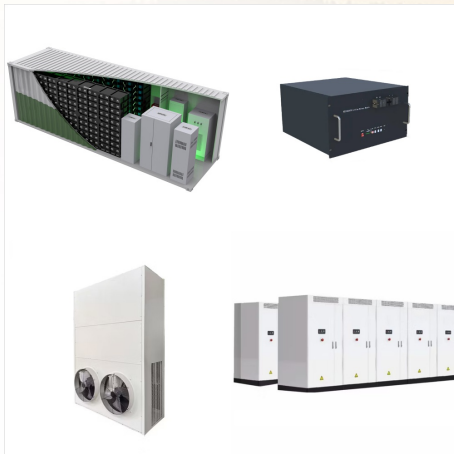
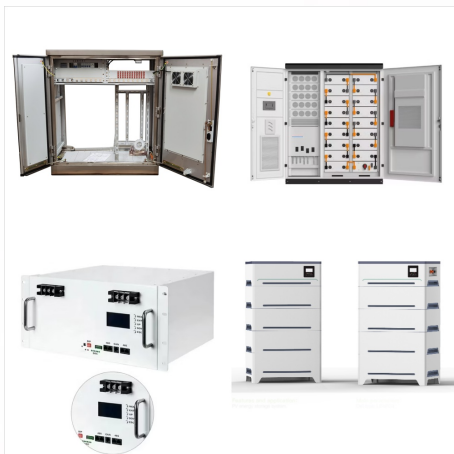


Figure 10.6 G2 of Interphase ??? The last stage of interphase is the second gap period, G2. During this stage, cells grow, replenish energy and synthesize needed macromolecules, such as proteins and lipids. Mitosis - When G2 is complete, the cell will enter mitosis. Although there are 5 phases in mitosis, with the exception of the metaphase to anaphase transition, these phases are not ???

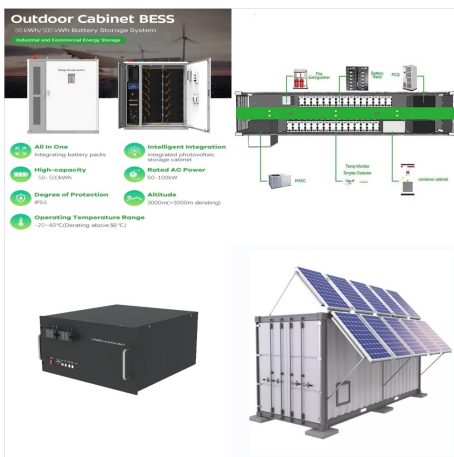


Cells of the Immune System???Student Worksheet
 . Answer the following questions as you proceed through the activity slides. 1. Name one type of cell involved in each of the following processes: a. Innate immunity: _____ b. Adaptive immunity: _____

31 2 POWER NOTES IMMUNE SYSTEM KEY



Defense Against Diseases: The Immune Response
How Does a Body Defend Against Invasion?
Microbes: Viruses Bacteria Fungi Protists Chapter
31: Immune System Chapter 31: Immune System
Barriers (1st Line of Defense): Prevent microbes
from entering body 1) Skin: Inhospitable
environment: Dry, nutrient-free zone Sweat/oil gland
secretions (antibiotics) Skin sloughed off ???



KEY CONCEPT. Fight infections. The immune
system consists of organs, cells, and molecules
that. The immune system is the body system that
fights infections. However, many parts of different
body systems help to prevent infection. Your ???



Immune System and Disease. Section 31.1:
Pathogens and Human Illness. Section 31.2:
Immune System. Section 31.3: Immune Responses.
Section 31.4: Immunity and Technology. Section
31.5: Overreaction of the Immune System. Section
31.6: Diseases That Weaken the Immune System.
Page 967: Chapter Assessment. Page 969:

31 2 POWER NOTES IMMUNE SYSTEM KEY



31 Immune System and Disease KEY CONCEPTS

31.1 Pathogens and Human Illness Germs cause many diseases in humans.

31.2 Immune System
The immune system consists of organs, cells, and molecules that TAKING NOTES Use a main idea diagram to study germ theory of disease. germ theory On the other hand, infectious diseases can be passed from one



31.2 Immune System ??? Three types of proteins fight off invading pathogens. ???Complement proteins weaken pathogen membranes. ???Antibodies make pathogens ineffective. ???Interferons prevent viruses from infecting healthy cells. antibody pathogens



fluid found within lymphatic vessels formed from blood plasma as blood flows thru blood capillaries, hydrostatic and osmotic pressures filter more plasma out of the blood capillary and into the interstitial spaces than is drawn back inside. --> excess fluid in the interstitial spaces is called interstitial fluid and when interstitial fluid enters the lymphatic capillaries its called lymph

31 2 POWER NOTES IMMUNE SYSTEM KEY



Figure 35.1 An athlete's nervous system is hard at work during the planning and execution of a movement as precise as a high jump. Parts of the nervous system are involved in determining how hard to push off and when to turn, as well as controlling the muscles throughout the body that make this complicated movement possible without knocking the bar down???all in just a few ???



Destroys pathogens in one of three ways: 1. Might make the pathogen ineffective by binding to the pathogens membrane proteins 2. Might cause pathogens to clump, making them easier for phagocytes to engulf and destroy 3. Other antibodies activate complement proteins that weaken the pathogens cell membrane



Complete 31.3 Power Notes. 31.2 Immune System
KEY CONCEPT The immune system is a body system that fights infection and prevents illness.
Chapter 31 review. 31.1: Pathogens and human illness Germs cause many diseases in humans.
There are different types of pathogens. Pathogens can enter.

31 2 POWER NOTES IMMUNE SYSTEM KEY



IMMUNE SYSTEM Study Guide KEY CONCEPT
The immune system consists of organs, cells, and molecules that fight infections. MAIN IDEA: Many body systems protect you from Fill in the blanks in the concept map to take notes on the differences between active and passive immunity. Imm un ity types 5. 10. t r ansfe rr ed occurs when 6. 8. also c alled



KEY CONCEPT: The immune systems consists of organs, cells, and molecules that fight infections.
31.2 Immune System. ??? Many other tissues and systems help the. immune system. ??? Skin is a physical barrier to infection. ??? Mucous membranes trap pathogens. entering the body. ??? The circulatory system transports immune. cells.
31.2 Immune System.



Once pathogens are inside, the immune system relies on the circulatory system to send chemical signals to coordinate an attack and to transport specialized cells to the infection. Summarize name some of the tissues that help to prevent and fight infection. Cells and proteins fight the body's infections.

31 2 POWER NOTES IMMUNE SYSTEM KEY



1. What is the immune system? 2. For each, describe how it helps the immune system by protecting the body from pathogens. MAIN IDEA: Cells and proteins fight the body's infections. 3. How do your basophil cells react when a pathogen enters the body? 4. What are three ways that antibodies help fight infection?



KEY CONCEPT. The immune system consists of organs, cells, and molecules that fight infections. The immune system is the body system that fights off infection and pathogens. Think of your body as a heavily guarded castle. When pathogens invade they must break down the outer wall or find a way around it.



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31 2 POWER NOTES IMMUNE SYSTEM KEY



Study with Quizlet and memorize flashcards containing terms like immune system, skin, mucous membrane, and circulatory system, skin is a physical barrier and is acidic, mucous membranes trap pathogens, sweat, saliva, and tears and more.



Chapter 31: Immune System Chapter 31: Immune System Barriers (1st Line of Defense): ??? Prevent microbes from entering body 1) Skin: ??? Inhospitable environment: ??? Dry, nutrient-free zone ??? Sweat/oil gland secretions (antibiotics) ??? Skin sloughed off 2) Mucous Membranes (digestive, respiratory, urogenital tracts):



antigen lymphocytes cellular immune response cytotoxic T lymphocyte mast cells phagocytes B cells immune memory helper T cell histamine macrophage T cells memory cell fever cytokine Study Questions 1. Identify the systems that are involved in the immune response. Describe the role of each system. 2.

31 2 POWER NOTES IMMUNE SYSTEM KEY



Nor do these books contain a satisfactory explanation of immunological activity as a whole, although they are replete of data on cellular and molecular details on specific immune responses, natural tolerance (self-tolerance) and immune regulation. Additional textbooks reproducing these obvious deficiencies, seem to me, are unnecessary.



8. ORGANS OF THE IMMUNE SYSTEM Thymus
??? glandular organ near the heart ??? where T
cells learn their jobs Bone marrow ???
blood-producing tissue located inside certain bones
blood stem cells give rise to all of the ???



IMMUNE SYSTEM Power Notes The immune
system is: Part How It Contributes to the Immune
System Skin Mucous membrane Circulatory system
Phagocyte T cell B cell Antibody Interferon Passive
Immunity Active Immunity Both Unit 9 Resource
Book Power Notes 97 McDougal Littell Biology