

Immune System

- _____
 - ♦ 150 years ago, if a patient survived a surgery they had a 50% chance of survival
 - ♦ No one knew why
 - Lister came up with a hypothesis
 - If medical equipment is sterilized, the death rate will decrease.
 - What is a disease?
- A _____ is any change, other than injury that disrupts the normal functioning of the body
 - ♦ Some are produced by agents such as
 - _____
 - _____
 - _____
 - ♦ Others are caused by materials in the _____
 - Cigarette smoke
 - UV rays
 - ♦ Some are _____
 - Hemophilia

Pathogens

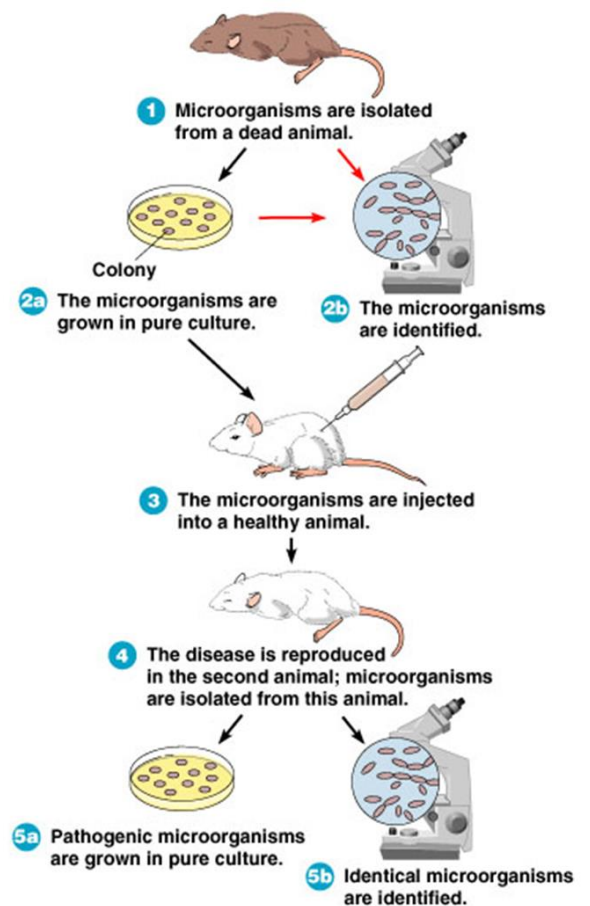
- Pathogens are _____ agents
 - ♦ "sickness makers"
 - ♦ Any disease caused by a pathogen is known as an _____
- The _____ attacks and destroys these disease causing invaders

Germ Theory of Disease

- Put forth by Chemist Louis Pasteur and Bacteriologist Robert Koch
 - ♦ The idea that infectious diseases are caused by _____ or germs

Koch's Postulates

- Series of _____ developed by Koch used to identify the microorganism that causes a specific disease
 - ♦ The pathogen must be _____ in the body of a _____ organism and not in a healthy one
 - ♦ The pathogen must be _____ and _____ in the laboratory in a pure culture
 - ♦ When the cultured pathogens are placed in a new host, they should _____ disease that infected the original host



- ♦ The injected pathogen should be isolated from the second host and should be _____

Why are Koch's Postulates important?

- If we know what pathogen causes the disease, it is the first step in _____ the ailments they produce

Agents of Disease

- For many pathogens the human body provides the _____ for growth
 - ♦ Temperature, nutrients and a watery environment
 - ♦ Many microorganism are present in the human body but are _____
- Some _____ destroy cells as they grow, release toxins, disrupt body functions, drain nutrients or block the flow of blood
- Agents that cause disease could be
 - ♦ Viruses
 - _____
 - ♦ Bacteria
 - _____
 - ♦ Protists
 - _____
 - ♦ Worms
 - _____
 - ♦ Fungi
 - _____

How diseases are spread

- _____
 - ♦ _____: shaking hands or sharing drink containers, sexual contact with an infected person
 - ♦ _____: pathogens are carried through the air (cough/sneeze)
 - ♦ _____
 - Food poisoning
 - Eating uncooked meat, drinking contaminated water
- _____
 - ♦ Animals that carry pathogens from person to person are known as _____
 - ♦ Animal bites
 - _____, _____

