

CORNELL NOTES

Name: _____ **Period:** _____

Class: Science **Date:** 8 September 2014

Topic: Chapter 3 Section 3 Viruses

Question Column

Notes Column

What are Viruses?

A strand of heredity material surrounded by a protein coating. Don't have nucleus or other organelles or a cell Membrane. Have many shapes. Discovered by an electron Microscope. Viruses are not Living.

How do viruses Multiply?

1. An active virus multiplies and destroys the host cell
2. The virus attaches to a specific host cell.
3. The hereditary material of the virus causes the cell to make viral hereditary material and proteins
4. New viruses form inside of the host cell
5. New viruses are released as the host cell bursts open and is destroyed.

What is an Active Virus?

When a virus enters a cell and is active, it causes the host cell to make new viruses and this process destroys the host cell.

Cornell Notes Continued:

What is a Latent Virus?

Some viruses are latent. This means that after they enter a cell, the hereditary material can become part of the cell's hereditary material – it does not immediately destroy the cell but could be dormant for many years.

How do viruses affect Organisms?

Viruses attack animals, plants, fungi, protists, and all prokaryotes (bacteria). Some viruses can only infect a specific type of cell, other viruses can infect many types of cells. When a virus attaches itself to a cell membrane, its keys must fit the attachment site on the cell membrane in order to fool the cell membrane to open up and let it in the cell.

How do we fight Viruses?

With Vaccines to prevent disease and viral infections.

What was the first Vaccine?

Edward Jenner developed the first vaccine in 1796 for smallpox.

How do we treat Viral Disease?

Our body can stop viral infection by making interferon. Interferon's are proteins that protect cells from viruses. Anti-viral drugs, vaccinations, improving sanitary conditions, quarantining patients, and controlling animals that spread disease help prevent viral diseases.

What is the research that Scientists do with Viruses?

Scientists are developing useful uses of viruses Called Gene Therapy by putting useful DNA inside cells to fix a genetic disorder in a patient.

Cornell Notes Continued: