

Cells vs. Viruses Venn Diagram Sort

Interactive Notebooking Activity

Objective:

The goal of this activity is to help students distinguish between cells and viruses. Often students think viruses and cells, particularly bacteria, are the same. Even though they have similarities, they are actually much different.

This activity can be used as an interactive notebooking activity or as an interactive manipulative card sort. Both are excellent formative assessment activities to check for understanding. Below are instructions for each activity.

Notebooking Activity:

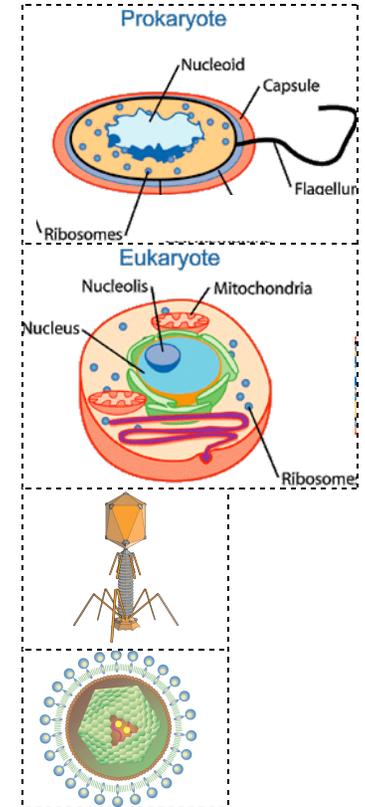
- Print/copy attribute cards (1 per student)
- Print/copy Venn diagram (1 per student) on legal size paper
- Glue Venn diagram into science notebook
- Instruct students to:
 - o cut the attribute cards out
 - o find a partner
 - o read, discuss, and sort card onto Venn diagram
- Students will store their cards in a small envelope (glued in notebook) for later use or glue the cards to their Venn

Manipulative Card Sort:

- Print Venn diagrams on legal size paper -1 per group of 2 or 3
- Print attribute cards on various colors of paper. (This helps keep each set of cards from getting mixed up.) -1 per group of 2 or 3
- Laminate, cutout and bag attribute cards
- Laminate Venn diagram boards
- Form groups of 2 or 3
- Each group will need a set of cards and Venn diagram board
- Students will work together to sort the attributes onto the correct section of the Venn diagram.

Attribute Cards

These always contain DNA as the main genetic material	Contains RNA as its main genetic material
Creates more of itself by going through mitosis	Built primarily of proteins and nucleic acids
Bacteriophages	Has a nucleus
One type of these (called E. coli) helps in digestion	Has shape specific proteins on outside surface
One type of these (called a streptococcus) causes strep throat in humans	Has a lipid bilayer membrane
Tuberculosis, diphtheria, and gangrene	Bacteria is an example of one of these
Some types of these can cause diseases	Contains the mechanisms needed to go through protein synthesis
Contains genetic material	Has nucleic acids surrounded by a protein capsid
Mutations in the genetic material occur in these	Nonliving particles
Destroyed by white blood cells in the immune system	More complex
One type of these causes the common cold	Influenza (The Flu) is caused by one type of these
HIV	



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Viruses

Cells

Both

