

## Cell Explorer Video Game

<http://www.biomanbio.com/GamesandLabs/Cellgames/CellExplorerAnimalCell.html>

Name \_\_\_\_\_ Date \_\_\_\_\_ Core \_\_\_\_\_

As you know, all living things are made of at least one cell. The evil Dr. Vial is planning to take over the world by developing a bioweapon (virus) that attacks specific parts of a cell. Your first mission is to explore the inside of the cell in a special Cell Exploration Vehicle (CEV) & send information back to the Pentagon so that we can find a way to thwart Dr. Vial's evil scheme. Shoot each organelle to learn about what job it does for the cell. The order in which you learn about the organelles does not matter.

Directions: 1. Answer all the "Question A's" while you play mission 1.

2. AFTER YOU FINISH MISSION 1, use what you learned to answer all the "Question B's"

1. a. What would happen to the cell if Dr. Vial's virus destroyed all the Mitochondria?  
  
b. Name at least 2 organelles depend on the Mitochondria & describe how they rely on each other.
2. a. What would happen to the cell if Dr. Vial's virus destroyed the Nucleus?  
  
b. What 2 organelles do you think interact with the Nucleus the most closely? **How do they interact?**
3. a. What would happen to the cell if Dr. Vial's virus destroyed all the Lysosomes?  
  
b. Name at least 2 organelles depend on Lysosomes & describe how they rely on each other.
4. a. What would happen to the cell if Dr. Vial's virus destroyed the Endoplasmic Reticulum (ER)?  
  
b. Name at least 2 organelles depend on the **ER** & describe how they rely on each other.

5. a. What would happen to the cell if Dr. Vial's virus destroyed the Cell Membrane?
- b. Which 2 organelles do you think interact with the Cell Membrane most? **How do they interact?**
6. a. What would happen to the cell if Dr. Vial's virus destroyed the Golgi Complexes?
- b. Name at least 2 organelles that work closely with the Golgi Complexes & describe how they rely on each other.
7. a. What would happen to the cell if Dr. Vial's virus destroyed the Ribosomes?
- b. Name at least 2 organelles that work closely with the Ribosomes & describe how they rely on each other.
8. a. What does the Cytoskeleton do for the cell?
- b. What would happen if Dr. Vial's virus destroyed the cell's Cytoskeleton?
9. a. What are Vesicles?
- b. Name at least 2 parts of the cell that form Vesicles to transport materials around the cell.