

Name _____

Decoding the Blueprint: Unveiling the Structure of Viruses

Open-Ended Response Answer Key

1. The structure of a virus enables it to infect host cells by allowing it to recognize and attach to specific receptors on the cell's surface, facilitating entry and replication.
2. The viral envelope is important for certain viruses because it helps them evade detection by the immune system and facilitates entry into host cells.
3. Some challenges posed by the structure of viruses for medical science include their ability to rapidly mutate, making treatment and vaccine development difficult, as well as their ability to evade the immune system.
4. Researchers could target the structure of viruses to develop treatments by identifying vulnerabilities in the viral structure and designing drugs or vaccines to exploit them.

