

Name _____

Unveiling the Mystery: The Reproduction of Viruses

Open-Ended Response Answer Key

1. The process of viral reproduction differs from cellular division in that viruses do not divide like cells but instead use the host cell's machinery to replicate their genetic material and produce new virus particles.
2. The lytic cycle is important for viral spread because it leads to the destruction of the host cell, releasing a large number of virus particles to infect neighboring cells.
3. The lysogenic cycle might benefit a virus by allowing it to remain dormant within the host cell, avoiding detection by the immune system and ensuring long-term survival.
4. Some strategies viruses have evolved to ensure their survival and proliferation include hijacking host cell machinery, evading the immune system, and adopting different reproductive cycles depending on environmental conditions.

