

Name _____

The Marvels of Protist Reproduction: Unlocking Nature's Mysteries

Open-Ended Response Answer Key

1. Conjugation differs from binary fission in protist reproduction in that conjugation involves the exchange of genetic material between two individual protists, leading to genetic diversity in offspring, whereas binary fission results in the production of genetically identical daughter cells.
2. Certain protists undergo multiple rounds of nuclear division during multiple fission to produce numerous daughter cells simultaneously, increasing their population size rapidly under favorable conditions.
3. One advantage of protists reproducing through both sexual and asexual methods is that it enhances genetic diversity within populations, potentially leading to increased adaptability and resilience to changing environmental conditions.
4. The ability to form cysts or spores enhances the survival of protists in their environment by providing protection during unfavorable conditions, such as drought or extreme temperatures, and facilitating dispersal to new habitats when conditions become favorable again.

