

Name _____

Cell Division Chronicles: The Tale of Mitosis, Meiosis, and Living Beings

Open-Ended Response Questions

1. Explore the significance of genetic diversity in the context of mitosis and meiosis. How does it benefit different species and ecosystems?
2. Explain why meiosis is specialized for the creation of gametes and how this process ensures genetic diversity in sexually reproducing organisms.
3. Imagine a world where all living things went through meiosis instead of mitosis. How might this world be different in terms of genetic diversity and adaptation?
4. Discuss the role of exceptions, like asexual reproduction in certain organisms, in the broader context of evolution and biodiversity. How do they fit into the narrative of life's diversity?

