

Name \_\_\_\_\_

## The Building Blocks of Life: Understanding Genetic Diversity

### Open-Ended Response Questions

1. Explain how genetic diversity allows for the adaptation of species to changing environments, using an example.
2. Discuss the importance of maintaining genetic diversity within populations for their long-term viability and persistence.
3. How can preserving and protecting genetic diversity benefit both natural ecosystems and human populations?
4. Give examples of genetic variations that may confer resistance to diseases or pests in different species.

