

Name \_\_\_\_\_

## The Building Blocks of Life: Understanding Genetic Diversity

### Multiple Choice Questions

1. What does genetic diversity refer to?
  - a) The variety of different species in a habitat
  - b) The variety of different genes within a species or population
  - c) The geographical distribution of species
  - d) The number of individuals in a species
  
2. Why is genetic diversity important for the survival of species?
  - a) It reduces the risk of disease outbreaks
  - b) It leads to widespread population declines
  - c) It has no impact on species survival
  - d) It allows for adaptation to changing environments
  
3. How does genetic diversity provide resilience against diseases?
  - a) By increasing the risk of disease outbreaks
  - b) By reducing the variety of genes within a population
  - c) By allowing individuals to possess genetic variations that confer resistance
  - d) By causing widespread population declines
  
4. What is the risk associated with inbreeding in populations?
  - a) Loss of genetic diversity and increased risk of genetic disorders
  - b) Increased adaptation to changing environments
  - c) Enhanced survival and resilience
  - d) Greater reproductive success
  
5. What practical applications does genetic diversity have in agriculture and medicine?
  - a) It has no practical applications
  - b) It allows for the development of new crop varieties with desirable traits
  - c) It reduces the need for personalized treatments in medicine
  - d) It leads to decreased agricultural productivity

