

Name \_\_\_\_\_

## Unveiling the Diversity: Exploring the Main Types of Fungi

### Open-Ended Response Answer Key

1. Mycorrhizal fungi play a crucial role in ecosystems by forming symbiotic relationships with plant roots, helping plants absorb water and nutrients from the soil, and facilitating nutrient cycling.
2. Lichens are considered a symbiotic relationship because they are formed from a mutually beneficial partnership between fungi and algae or cyanobacteria, where the fungi provide a protective structure for the photosynthetic partners, and the algae or cyanobacteria produce food through photosynthesis.
3. Yeasts contribute to human activities by fermenting sugars to produce alcohol and carbon dioxide, processes used in baking, brewing, and winemaking, among others.
4. Some potential applications of exploring the diversity of fungi include discovering new species with unique properties for medicine, agriculture, and industry, as well as gaining insights into ecological roles and interactions in ecosystems.

