

Name \_\_\_\_\_

## The Truth About Protists and Disease: Separating Fact from Fiction

### Open-Ended Response Answer Key

1. Plasmodium transmits malaria to humans through the bite of an infected mosquito. When an infected mosquito bites a human, it injects Plasmodium sporozoites into the bloodstream, which then travel to the liver and multiply before infecting red blood cells.
2. Some protists are used in biotechnology and pharmaceuticals because they produce compounds with potential medical applications, such as antibiotics, anti-inflammatory agents, and antifungal agents.
3. One method of preventing the transmission of giardiasis is by ensuring the cleanliness and safety of water sources, such as by treating water with filtration or chlorination methods and practicing good hygiene, including handwashing and proper food preparation.
4. Protists like Euglena could contribute to sustainable energy production by producing biofuels through photosynthesis, offering an alternative to fossil fuels and reducing carbon emissions.

