

Name _____

The Pathogen Playground: Exploring the Main Types of Disease-Causing Microbes

Open-Ended Response Answer Key

1. Antibiotics work by targeting specific structures or processes in bacterial cells, either killing the bacteria or inhibiting their growth.
2. Ways to prevent the spread of viral infections include practicing good hygiene, getting vaccinated, avoiding close contact with sick individuals, and staying home when sick.
3. Scientists may study parasites by observing their life cycles, conducting experiments in the laboratory, or analyzing their genetic makeup to identify potential targets for treatments.
4. Developing vaccines for some viruses is challenging because viruses can mutate rapidly, making it difficult to predict which strains will be circulating in the future. Additionally, some viruses, like HIV, have complex structures that make it hard for the immune system to produce an effective response.

