

Name _____

Riding the Waves: Exploring the World of Physics

Open-Ended Response Answer Key

1. Possible answer: I see the waves rolling onto the shore, with white foam at the top. These waves are created when the wind blows across the ocean's surface, transferring energy to the water and causing it to ripple and form waves.
2. Possible answer: I encounter sound waves when I listen to music on my headphones. Sound waves carry the music's sound from the headphones to my ears, allowing me to enjoy my favorite songs.
3. Possible answer: Knowing the speed of a wave is essential in weather forecasting. Meteorologists use the speed of sound waves to predict approaching storms and their arrival time, helping people prepare for severe weather conditions.
4. Possible answer: Studying earthquake waves can help us understand and predict seismic activity, allowing us to develop better building designs to withstand earthquakes and improve early warning systems to save lives.

