Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Waves on a String Exit Quiz

1. A student is sitting on the edge of a swimming pool. The student repeatedly dips his foot in and out of the pool, making waves that move across the water. The student dips his foot slowly at first and then does it faster, each time to the same depth. Which of the following properties of the waves **increases** as the student dips his foot faster?

|  |  |  |
| --- | --- | --- |
|   | **A.** | frequency |
|   | **B.** | period |
|   | **C.** | velocity |
|   | **D.** | wavelength |

2. Define the following your own words and draw a picture to represent the word.

|  |  |  |
| --- | --- | --- |
| Word | Definition | Picture |
| Amplitude |  |  |
| Frequency |  |  |
| Tension |  |  |
| Damping |  |  |

3. How do waves behave when they have a fixed end? Explain and draw a picture.

4. How do waves behave when they have a loose end? Explain and draw a picture.

5. Based on your experiences with damping in the simulation, how do you think you could damp a sound wave?