

# Transverse Waves

Name \_\_\_\_\_ Date \_\_\_\_\_

## Important Equations:


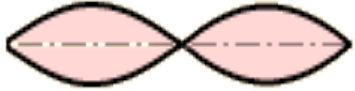

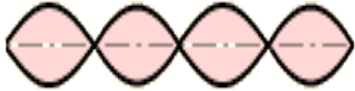
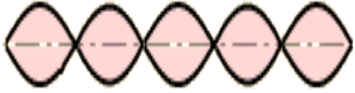
$$f = 1 / T$$

$$\lambda = 2L/n$$

$$v = f \lambda$$

## Data and Calculations:

Length of the spring= \_\_\_\_\_

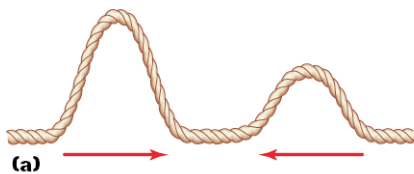
Harmonic	Time (20)	Period	f	$\lambda$	v
					
					
					
					
					
<b>Average Velocity</b>					

## Transverse Waves

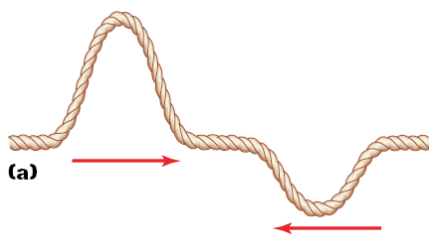
Name \_\_\_\_\_ Date \_\_\_\_\_

### Observations:

1. As you send pulses down to your partner, describe the reflected pulse.
2. What would you have to do in order to:
  - a) increase the frequency
  - b) increase the wavelength
  - c) increase the amplitude
  - d) increase the speed
3. Have each partner send a pulse at the same time. Try to time it so that the two pulses meet near the middle of the spring.



a) describe the result of two pulses meeting “in Phase”



b) describe the result of two pulses meeting “out of Phase”