

- a. Can you make more than one type of wave that pulses through the spring?
(Try wiggling the spring from side to side or using a push-pull motion.)

- b. How many waves can you make with the spring at one time?

- c. How big can you make the waves?
(Think: How can we use a meter stick to measure the waves?)

- d. How is the size of a wave related to the number of waves you can make at one time?

- e. Does making more waves with the spring require more or less energy input?

- f. How does the tension in the spring affect the waves?
(To increase the tension, gather some of the spring at one end and hold it while you make waves.)

- g. Does the whole spring stay at a different location when a wave pulses through it, or does it return to its original position? Does a wave accelerate as it travels, or does it travel with mostly constant speed?



Reflection Questions

1. If you were describing the waves that you made to another person, what are some words you would use to describe the characteristics of the waves?
2. Draw a picture of the spring with one wave.
3. Draw a picture of the spring with multiple waves.

