

MAKING WAVES:

NAME, DATE, SECTION

WORKING WITH A SLINKY:

If you cannot follow these directions, be an observer!!!!

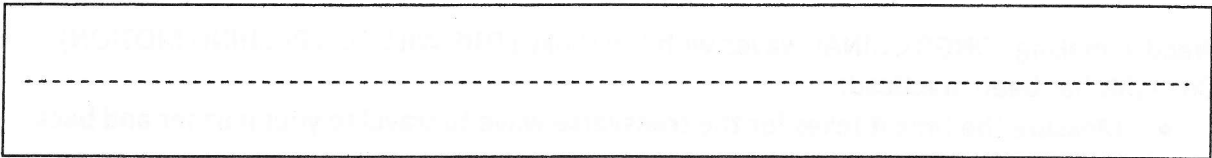
- Keep the slinky on a flat surface.
- Do not pick up the slinky unless it is completely compressed together.
- Do not allow the slinky to become kinked in any way.
- Do not create a wave unless the slinky is being firmly held at both ends.

SCENARIO ONE:

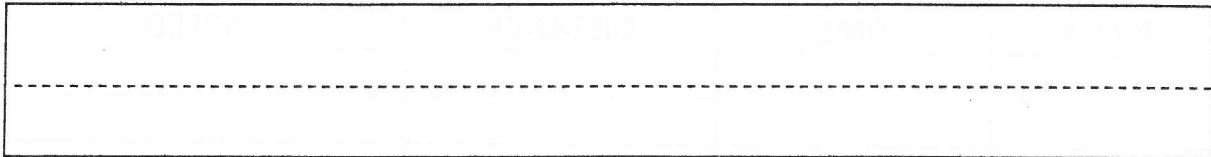
Send transverse waves to your partner.

Draw an illustration of the SENT wave (incident wave) and the RETURN wave (reflected wave).

SENT:



RETURNED:

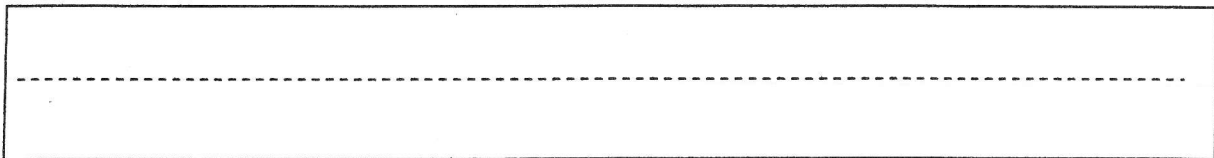


SCENARIO TWO:

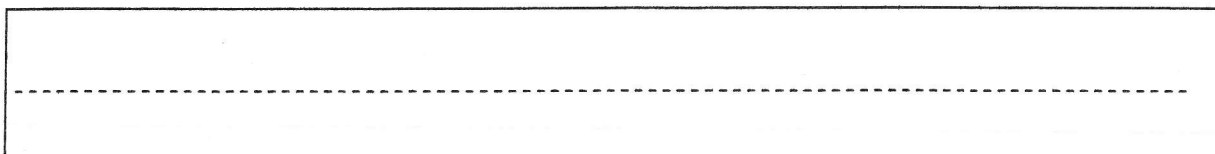
Send longitudinal waves to your partner.

Draw an illustration of the SENT wave (incident wave) and the RETURN (reflected wave).

SENT:



RETURNED:



Measure the length of the outstretched slinky in meters.

Practice making TRANSVERSE waves with the slinky (THIS WILL BE A SIDE TO SIDE MOTION).

Once this has been practiced:

- Measure the time it takes for the transverse wave to travel to your partner and back.
- Repeat this wave 3 times and take the average time.

TRIAL #	TIME	DISTANCE	SPEED
AVERAGE			

Practice making LONGITUDINAL waves with the slinky (THIS WILL BE A PUSHING MOTION).

Once this has been practiced:

- Measure the time it takes for the transverse wave to travel to your partner and back.
- Repeat this wave 3 times and take the average time.

TRIAL #	TIME	DISTANCE	SPEED
AVERAGE			

ILLUSTRATION OF A TRANSVERSE & LONGITUDINAL WAVES:

Include the following: Wavelength, compression, rarefaction, amplitude, crest, trough, rest position (equilibrium), wave height. Not every feature will be shown for both wave types. Include direction of the medium and direction of the energy.
