

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

## Wave Activity Answer Sheet

### Station A: Telephone Cups

- 1) How come you are able to hear your friend? Explain how the sound was transmitted to you.
- 2) What happens if you hold the string while you talk?

### Station B: Pencil in a Cup

- 1) What do you notice about the pencil? Describe what you see.
- 2) What wave interaction is responsible for this observation.(reflection, refraction or interference) Explain

### Station C: Reflection of a Ball



- 1) Show the path of the ball to the wall and away from the wall. Complete for both roll #1 and roll #2.
- 2) What wave interaction is responsible for this observation.(reflection, refraction or interference)

### Station D: Waves On A Rope

- 1) Did you produce a transverse or longitudinal wave? Explain.
- 2) When you increase the speed of the up-and-down

### Station E: Waves on a Slinky

- 1) Did you produce a transverse or longitudinal wave? Explain.

### Station F: Light and Bubbles

1) After watching the bubble screen pop several times, can you see a pattern of colors? **Write down the pattern you see.**

2) Observe the screen right before the bubble pops. Try to

### Station G: Where's the Penny

1) What did you notice when you added water to the bowl?

2) Try to see the penny through the water. If you can't

1)

### Station H: Light as Waves

1) How do water waves travel outward from a single drop of water from an eyedropper?

2) Do water waves reflect off all sides of the pan?

3) When you made waves using a straw, did the waves reflect? Did the angle the wave hit the wall match the angle of the wave leaving the wall?

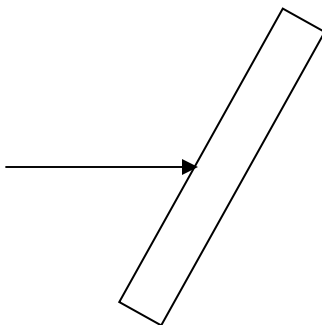
### Station I: Pinhole Viewer

1) Look through the viewer and write down your observations. Is the image erect (right-side-up) or inverted (upside-side-down)?

2) Draw a labeled light diagram to explain your observations.



### Station J: Refraction



1) Draw the line emerging from the other side of the glass.

2) Do you think the wave of light travels faster or slower as it passes through the glass? Explain.

