

Ocean Investigation Lab

Topic: Waves – ocean depth

Directions: Read all procedures before beginning. On your lab sheet, fill in the topic line and answer the question “What do you know about the topic?”

Materials: two small plastic pans, food coloring, ruler, stopwatch

Procedure:

1. Fill one pan with water to 1 cm depth and add food coloring.
2. Lift one end 2 cm above the desk and watch the wave motion.
3. Fill the other pan to 1 cm depth.
4. Place the pans alongside each other and repeat step 2 with each.
5. Fill pan two (the one filled with colorless water) to 2 cm. Record your prediction about what will happen when you repeat step 2.
6. Repeat step 2 with both pans.
7. Record your observations. Try to measure the difference in wave speed. Record your process and results.
8. Summarize your investigation on the lab sheet.
9. Answer “Are there new questions or investigations you would like to try?” If possible begin investigating these new questions.
10. If your station is messy, prepare for the next group by dumping the water out of both pans. Pan 2 will need to be emptied.

