

Ocean Investigation Lab

Topic: Waves – energy transfer

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: small pan, rubber duck, water

Procedure:

1. Fill the pan with water.
2. Practice making waves in the pan by raising one end several centimeters off of the desk.
3. Determine the motion of the wave and how this is related to its energy.
4. Predict the results of step 5 on your lab sheet.
5. Add the rubber duck to the pan and repeat making waves.
6. Record your observations.
7. Try to move the duck from one spot in the pan to another using only the energy of the waves.
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.