

Physics 140 Discovery Room #11

13.2 electromagnetic waves, microwaves, microwave ovens; 16.1–16.3 radiation

Name_____

Date/Time_____

Microwave Ovens

Place the wet paper towel on the styrofoam shelf and place a length of thermal fax paper over it. Turn on the microwave for 5 seconds.

1. What do you see? Why?
2. What kinds of waves are microwaves? What is their velocity?

Cloud Chamber

Inside this chamber there is alcohol vapor. The bottom is filled with dry ice so that alcohol evaporates from the warm top side and diffuses toward the cold bottom. Watch the tracks of alcohol droplets.

1. What are you observing? Why?
2. Why are some of the tracks straight and other tracks curved?

Superconductor and small magnet

Watch what happens as the small magnet is placed upon the superconducting material that has been cooled by liquid nitrogen.

1. What are you observing? Why?

Using the margins of this sheet of paper, write down a question regarding a topic, concept, or example you do not understand from this week in PHYS140.