



a WOW Lab

BLUEPRINT

Styrofoam Plate Speaker

Time / Cost Estimate

Time: Prep - 30 min to 1 hr / Active - 1 hr to 2 hr

The time varies significantly depending on whether the teacher chooses to do this as a demonstration or as a class activity. If the teacher builds the model ahead of time, it will take around half an hour to build, and then another half hour of class time to demonstrate the system and explain the application of the concepts behind it.

If the class is split into 15 groups, it will take approximately a full hour to distribute the materials, manufacture the speakers and do preliminary testing. It will take another full hour to explain the principles, mount the speakers, and troubleshoot. Ideally, this activity would be split between two one-hour classes.

Initial Cost: \$27.00 - \$47.00

Excluding the amplifier, the cost for the experiment is relatively low. The quantity of wire purchased will provide enough material to repeat the activity in future years.