

Charge *Dynamics first* Equipment

List

- fur or cloth (for charging rods)
- plastic rods (approx. ~ 0.5 " diameter by 10" long)
- white board or large sheet of paper with markers
- Scotch Magic Tape®
- stands with wood dowels to support the tapes
- pith ball [small Styrofoam balls (~ 1 cm diameter) covered with aluminum foil and hung from fine insulating (e.g. polyester) thread]

Special Instructions

Extra pith balls should be available. Plastic rods should be clean and dry. Handling by students can leave oils on the rods.

The experiments in this tutorial are more reliable in dry weather conditions. Students should be encouraged to recharge their pieces of tape, rods, *etc.*, regularly and may need to repeat experiments several times in order to obtain consistent results. It may be necessary to wash rods and other equipment before tutorial with soap to remove oils. Students should be told to handle equipment as little as possible.