



a WOW Lab
BLUEPRINT

Invisible Energy

Introduction

Create a buzz in your classroom with this electrifying activity which uses a Van de Graaff generator to illustrate the awesome power of electric forces. In this dramatic activity, different objects are made to interact with a metallic sphere which is being continuously charged by a Van de Graaff generator. Students will be amazed by the sight of a fluorescent tube glowing when positioned radially to the charged sphere, and by the flying aluminum pie plates which take flight one by one from a stack placed on top of the generator. For younger students, this activity will introduce the concept of electric fields and will demonstrate that electricity can act as a force. For older students, this activity provides a tangible introduction to the discussion of electric field lines, charges, equipotential surfaces, potential differences, Coulomb's force and various other topics.

Invisible Energy requires little time to set-up, creates no mess and can be easily accomplished and discussed in a single class period. Since all of the materials are reusable, the activity can be repeated in future years with little or no additional cost.