Induced Charge
Electrophorus

Electrophorus: E-1 S-3
All else: E-1 S-2

1A

Place charge on dielectric of electrophorus by rubbing with fur.

Place metal plate on dielectric, touch to remove charge of sign like that on the dielectric, remove plate, and show that it is charged by bringing it near an uncharged electroscope.

Discharge plate by allowing spark to jump to finger. The discharge can be heard by students not too far away.

Show that the procedure can be repeated indefinitely without affecting charge on dielectric.

Bring out where one does work to account for the electrical energy stored on the metal plate, and dissipated in the spark.