

Source: [KBhPHYS201IntroToElectrostaticsLN](#)

## 1 | The Electroscope

Screen Shot 2020-08-24 at 7.31.10 PM.png

About how this works...

1. Bring in some external charge near the electromitor (the ball-y part)
2. The rod becomes polarized, pushing the  $+$  protons down towards the “gold leaves”
  - If the rod is not close enough to cause electron flow but is close enough to polarize...
    - Gold leaves temporarily push apart because positive repels positives
    - When charged rod removed, leaves come back
  - If the rod is close enough to cause  $e^-$  to flow out of the electromitor, making the whole rod more positive instead of a temporary polarization...
    - Gold leaves permanently (until somebody/the air discharges it, anyways) separated
    - When charged rod removed, leaves stay put