

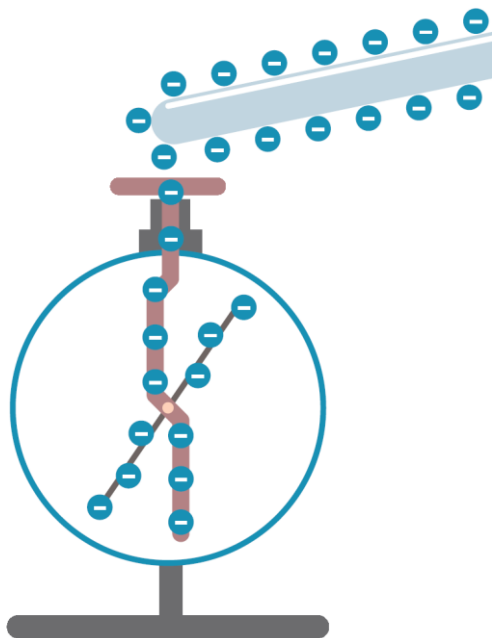
1 Electricity and Magnetism

1.1. Charge and Electric Force

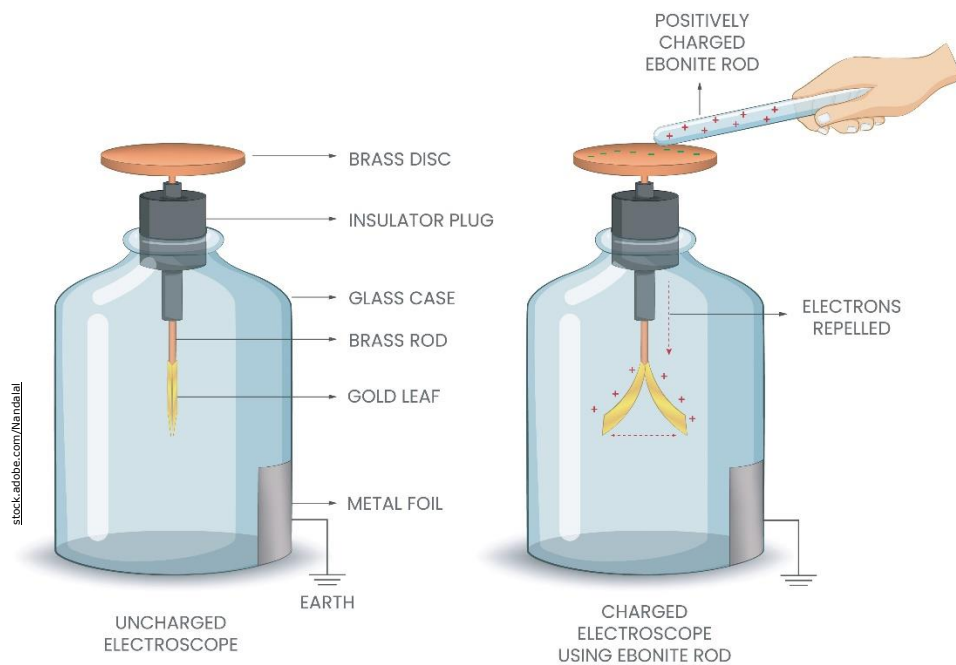
Electric Charge

V 1. This experiment aims to check various rubbed substances for their electric charge status. A+ B+

Topic/ Target	Separation of electric charges by friction
Materials required	Glass rod, plastic rod, electroscope, glow lamp, wool cloth, piece of leather, Styrofoam board, piece of dry newspapers
Setup of the Experiment	1. Rub the plastic rod with the wool cloth and touch the head of the electroscope. Then touch the electroscope with your hand to discharge it. 2. Rub the glass rod either with the piece of leather or with the piece of the newspapers. Then touch the head of the electroscope. 3. Darken the room and rub the Styrofoam board with the wool cloth. Then feel the Styrofoam board with the glow lamp.
Results	

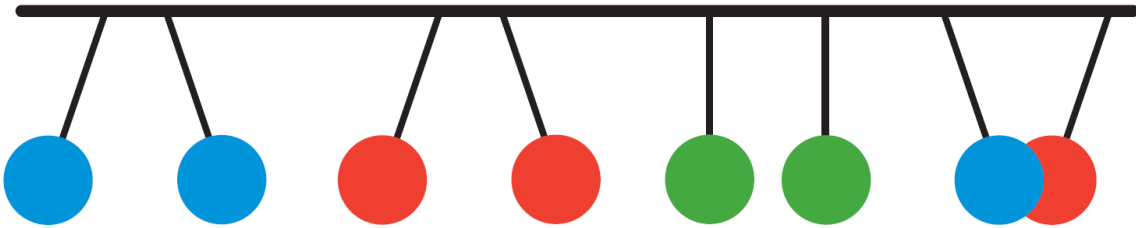


GOLD LEAF ELECTROSCOPE



A 2.

Attraction and repulsion are important properties of the electric charges. Explain the laws of attraction and repulsion using the figure below by indicating the electric charges of the balls. $A^+ B^+$



LÖSUNGEN

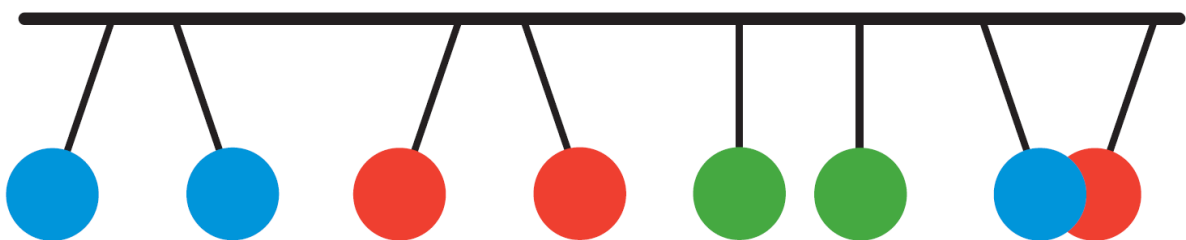
1.1. Charge and Electric Force

Electric Charge

V 1. This experiment aims to check various rubbed substances for their electric charge status. $A^+ B^+$

Topic/ Target	Separation of electric charges by friction
Materials required	Glass rod, plastic rod, electroscope, glow lamp, wool cloth, piece of leather, Styrofoam board, piece of dry newspapers
Setup of the Experiment	1. Rub the plastic rod with the wool cloth and touch the head of the electroscope. Then touch the electroscope with your hand to discharge it. 2. Rub the glass rod either with the piece of leather or with the piece of the newspapers. Then touch the head of the electroscope. 3. Darken the room and rub the Styrofoam board with the wool cloth. Then feel the Styrofoam board with the glow lamp.
Results	<i>Individual solution: Document your observations</i>

A 2. Attraction and repulsion are important properties of the electric charges. Explain the laws of attraction and repulsion using the figure below by indicating the electric charges of the balls. $A^+ B^+$



The blue balls are negatively charged, the red ones have a positive charge. The green balls are neutral. Two positive vs. two negative charges repel each other. Attraction takes place only if the charges are different.