Charging an Object

A: Charge by Friction – If you rub two objects together, some objects get charged.



Ebonite and fur may be neutral in charge, but if you rub them together, the ebonite rod becomes negatively charged and the fur becomes positively charged. Why? Electrons move **from** the <u>fur</u> **to** the <u>ebonite</u> rod. The ebonite rod has an <u>excess</u> of electrons while the fur has a <u>deficit</u> of electrons.

Some substances tend to grab electrons and become negatively charged while others tend to give away electrons and become positively charged. The textbook has a chart ranks materials. Compare ebonite and rabbit fur. Ebonite has a greater tendancy to grab electrons compared to the rabbit fur, so it will become negatively charged.

Note: The 2 objects become charged with opposite charges.

B: Charge by Contact – when a charged object touches another object, electrons move to balance the charges. (Balance the charge means to the 2 objects equal in charge)





The electrons will move from the right object to the left object if they touch. Remember only electrons move!



Note: The 2 objects become charged similarly charged