

(2pts) 1.

Four lightweight balls A, B, C, and D are suspended by threads. Ball A has been touched by a plastic rod that was rubbed with wool. When the balls are brought close together, without touching, the following observations are made:

- Balls B, C, and D are attracted to ball A.
- Balls B and D have no effect on each other.
- Ball B is attracted to ball C.

What are the charge states (glass, plastic, or neutral) of balls A, B, C, and D? Explain.

b/c B & D don't interact, they are neutral.

A has "plastic" charge

~~C~~ C has "glass" charge (opposite of "plastic" charge).

b/c C is attracted to neutral objects,  
it must be charged.

b/c C is attracted to A, it has  
the opp. charge of A.