

**Activity – Charging by Contact****Purpose:**

To determine what kind of charge is transferred when a charged object contacts an uncharged one.

**Background:**

Use your text on pg. 407 to explain what charging by contact is. Put your answer in the space provided.

Charging by contact:

**Materials:** pith-ball electroscope  
vinyl strip (opaque)  
acetate strip (clear)  
paper towel

**Procedure:** Refer to the overhead for the steps to follow.

**Observations:**

Step	Procedure	Observations
1	Negatively charged vinyl brought near uncharged pith ball.	
2	Positively charged acetate brought near uncharged pith ball.	
3	Negatively charged vinyl contacts pith ball, is removed and brought near pith ball again.	
	Positively charged acetate brought near same pith ball.	
4	Positively charged acetate contacts pith ball, is removed and brought near pith ball again.	
	Negatively charged vinyl brought near same pith ball.	

**Analysis:**

1. What happens when a charged object is placed near, but does not touch, the neutral pith-ball electroscope?
2. What can you infer about the transfer of electric charge when the pith ball is touched by:
  - (a) A negatively charged object
  - (b) A positively charged object
3. Use diagrams to help illustrate your observations in steps 3 and 4.