Experimenting With Charges Activities



Part A: Charging by Friction & Conduction

Question: How can you tell what kind of charge is transferred when one object touches another?

Hypothesis:					
Materials:	pith ball	ebonite rod	fur	glass rod	
Procedure:					
 Charge a Bring the a. Recharg a. Ground a. 	an ebonite rod using e ebonite rod close t Record observation e the ebonite rod. 1 Record observation the pith ball Record observation with glass rod.	a piece of fur. to the pith ball – DO N s OUCH THE PITH BALL s	IOT TOUCH IT YI		Figure A

Objects	Predicted Charge	Approaching the Pith Ball	After Touching the Pith Ball	After Grounding
Ebonite				
Fur				
Glass				
Silk				

Questions:

1. Draw what happens to the charges when you touch the pith ball with the positive glass rod.

2. What happens when a charged object (ebonite or glass rod) touches the pith ball?

Part B: Charging by Grounding (Induction)

Question: Can an object still have a charge even after is has been grounded?

Hypotl	hesis:					
Mater	ials:	Ebonite rod	fur	electroscope	Glass rod	
Proced	lure:					
1.	charged ebo	•	metal-leaf elect	roscope, approach it wi	th a	d
2. 3.		pp of the electroscope 1 with a charged glas	•			
4. 5.	•	electroscope with the		HING the electroscope	QUICKLY touch the ball.	
5. 6.	Move the eb	ponite rod away. ord observations				
7.		ype of charge that wa ediction using the cha		e electroscope.		<u> </u>
8.	Repeat steps	s 4-7 with a charged g	lass rod.		-	

о.	Repeat steps 4-7	with a charged glass

Observations:

Objects	Close to electroscope	After charging electroscope	After QUICKLY touching electroscope	After moving charged rod away
Ebonite				
Glass				

Questions:

- 1. What happens when you move the charged rod away after grounding the electroscope?
- 2. Why do you think this happens?