



Interactive Simulation

Name: _____ Date: _____

Balloons and Static Electricity

Did you know?

An object's charge can change by transferring electrons (negatively charged) from one object to another. Charges cannot be created nor destroyed, only transferred.

Investigation Question

How does the transfer of electrons change an object's attractive or repulsive nature?

Prediction

Procedure

Part I

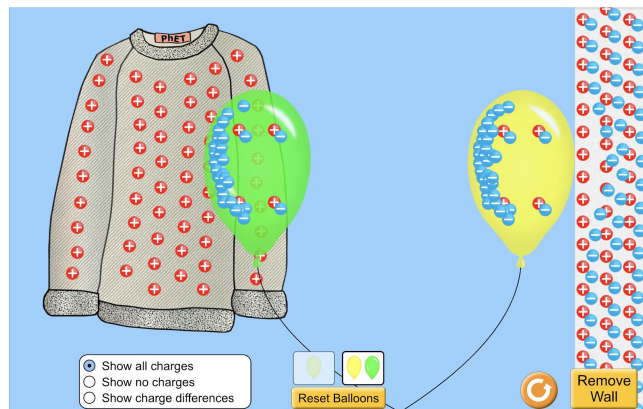
1. Rub the yellow balloon on the sweater. What happens?

2. Collect all of the negative charges from the sweater and attach the yellow balloon to the wall. Observe the charges interaction with the wall.

Observations	Draw

Part II

1. Select the yellow and green balloon button at the bottom of the screen.
2. Rub the yellow balloon on only the top half of the sweater to collect only half of the negative charges. Attach the yellow balloon to the wall at the center.
3. Rub the green balloon on the bottom half of the sweater to collect the other half of the negative charges. Attach the green balloon to the right side of the sweater in the center.



4. Click the remove wall button. What happens to the yellow balloon?
5. Click on the yellow balloon and move it away from the sweater. How can you use the green balloon to keep the yellow balloon from attaching to the sweater?



Interactive Simulation

Conclusion

1. How do objects become positively charged?
2. How do objects become negatively charged?
3. What type of interactions did objects of the same electrical charge display?
4. What type of interactions did objects of different electrical charges display?
5. Did objects have to touch to interact? What causes this?