

## Observing Charged Objects

Record your observations as your teacher does the following demonstration. Cut two pieces of string about 3 feet in length (or long enough to extend from your teacher's head to the ceiling). Tie the ends of the strings together and use a thumbtack to hang them from the ceiling. Tie a balloon to the end of each string. Stand under and between the balloons and rub both them on your hair. Let go of the balloons and walk away from the balloons.

1. What happens to the balloons?
2. Offer an explanation for the behavior of the balloons.
3. Predict which subatomic particle is most likely to be transferred during the rubbing. Give a reason for your choice.

### ANSWERS

1. The balloons move apart, or repel each other.
2. Rubbing caused the balloons to gain a similar charge.
3. Electrons are most likely to be transferred based on their location in atoms and their motion.