

Name _____

Static Balloon & Hair

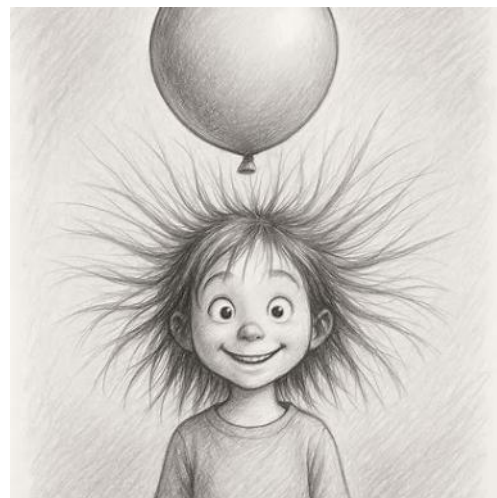
Scientific Question: How does the number of times you rub a balloon on your hair affect how much hair stands up?

Background Information: Rubbing a balloon creates an invisible force called static electricity. This is an electric force.

Hypothesis: If I rub the balloon more, then (more hair / less hair / the same amount of hair) will stand up.

Materials:

- balloon
- student volunteer or wig
- stopwatch or 20-sec count
- ruler (optional)
- data table



Procedure:

1. Record the starting conditions (hair dry? room humid?).
2. Predict what will happen for 3 rubbing times (write hypothesis).
3. Trial A — Rub balloon for 5 seconds on hair. Slowly lift balloon 2 cm from hair and observe for 10 seconds. Count/measure how many hairs stand or how high hair lifts. Record.
4. Repeat step 3 two more times (3 trials) for reliability; average results.
5. Repeat whole set for 10 seconds and 20 seconds of rubbing.
6. Compare averaged results across rubbing times.

Data table:

Rubbing Time	Trial 1	Trial 2	Trial 3	Average
5 seconds				
10 seconds				
20 seconds				

Conclusion: _____

