Jumping Beans

Objective: This experiment will examine the properties of static electricity.

Concepts:
- Static electricity is a simple form of electric energy and can be created using friction

Materials:
- Three soybeans
- One 11 inch clear balloon

Instructions:
1. Place three soybeans into the balloon. Blow up the balloon, but not all the way, and tie it.
2. Rub the balloon, with the bean inside, back and forth against your pants leg or your hair for about 20 seconds.
3. After the allotted time, stop moving the balloon and let the soybeans settle. How do the beans move? How do they settle?
Do they come close together or push each other apart? Once the beans have stopped moving, try passing your hand close under the beans but not touching the balloon. What happens?

What's going on?
Rubbing the balloon generates static electricity. Friction can separate positive and negative charges that make up all matter. This is static electricity. These charges build up on the beans. Similar charges repel each other and opposite charges attract. Which type of charges, similar or opposite, build up on the beans based on your observation?