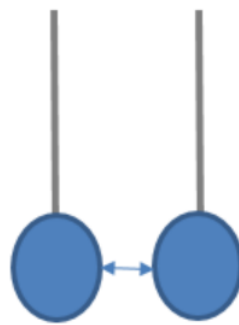


## 26.4: Procedures

You will charge various objects and observe the effects of charge.

### Hanging Balloon Bounce

1. Inflate two balloons, tie them closed, and attach each balloon to a 1-yard length of string. Hold the two strings, allowing the balloons to hang near each other without touching. The balloons should be about 2 inches apart. Have a team member charge one of the balloons with a piece of fabric or their hair, then gently return the balloon to the hanging position and observe. Record your observation.



*2 inch separation*

Figure 26.4.1

2. Have two team members each charge a balloon, then gently return the two balloons to the hanging position at the same time and observe. Record your observation.

### Rolling Soda Can Race

3. Find a clear path for two soda cans to travel side by side. Lay the two empty soda cans on their sides, at the starting line. Also, decide where the finish line will be.



Figure 26.4.2

4. Choose two “runners” from your team. The runners will each need an inflated balloon. Allow the runners 1 minute to charge their balloons, and then race their cans using only static electricity from the balloon to make the can roll (do not touch the can). Record the winner of this competition and what the winner used to charge their balloon.

### Sticky Tissue Competition

5. Tear the tissue into several tiny pieces and spread them on your team table. Everyone will need to have an inflated balloon for this competition.
6. Choose how long you will charge your balloons, and then compete for the tissue pieces. Record the winner of this competition and what the winner used to charge their balloon.

## Jumping Pepper

### Warning

- Pepper causes stinging of the eyes. Be careful not to get pepper in your eyes.
- Balloons make a loud noise if popped.

7. Lay the piece of paper on a table and sprinkle a spoonful of ground black pepper onto the paper. Choose one team member to charge their balloon.
8. Position the charged balloon about 12 inches above the pepper and then slowly lower it while the rest of the team observes. Record your observations.

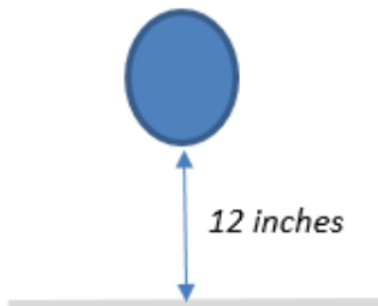


Figure 26.4.3

### Clean-up

- Use the scissors to cut a small hole where balloons are tied so the air will escape quietly (or wash off the pepper if you want to keep your balloon)
- Dispose of the balloon, string, pepper, and pieces of tissue
- Wash your table

### Contributors and Attributions

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