



Static Electricity: Student Activity Sheet

Name: _____ Date: _____

Explore

Part 1: Exploring Static Electricity

1. Open up the pepper and place it on the index card.
2. Blow up the balloon and tie it.
3. Place the balloon next to the pepper. What do you notice? _____

4. Take the balloon and rub it on your clothes for 5-10 seconds. Now place the balloon next to the pepper without touching it. Describe what you notice. _____

What force did you see? _____

5. Try and remove as much pepper from the balloon as you can.

Explain

1. After you watch the video write a one-sentence summary of what you learned.

Elaborate

Part 2: The Dancing String

1. Use your string and paper clip from the floating paper clip activity. If you have not done this activity, tie the string to a paper clip.
2. Charge your balloon by rubbing it against your clothes for 5-10 seconds.
3. Place the balloon above the end of the string. **Do not touch the string.** What do you notice? _____

What's happening...

Do the charged balloon and the string have the same or different charges? How do you know? _____

Part 3: Push The Cup

1. For this challenge, you will need your balloon and a styrofoam cup.
2. Using only the balloon and a styrofoam cup, your challenge is to push the cup with the balloon without touching the cup.
3. You may not use wind or blow on the cup.
4. Do the charged balloon and the cup have the same or different charges? How do you know? _____

Part 4: Push-A-War

You will need to work with a partner for this challenge. You will need an aluminum can for this activity.

1. Tape the bottom of your styrofoam cup to the bottom of your partner's styrofoam cup.
2. Place the foam cups in the middle of the table. Place the taped-together cups between you and your partner.
3. Your challenge is to move the foam cups to your partner's side of the table, using only a charged balloon. You do not want to allow the foam cups to come to your side.
4. Start the challenge with your partner and see who can get the foam cups to the other side the fastest.
5. What was difficult about this challenge? _____

6. Try this challenge again with an aluminum can.

Evaluate

1. Do the charged balloon and the aluminum can have the same or different charges? How do you know? _____

Fictional Text Integration: The Big Balloon Race

1. How did Ariel end up in the balloon? _____

2. What was the red tape used for? _____

3. Summarize the story using specific details from the text.
