Materials:

Iron filings and Paper Clips, Jar, Magnets

Directions: DO NOT OPEN THE JAR!!!

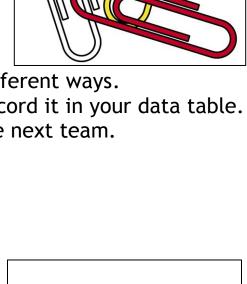
- 1. Place the different magnets next to the jar.
- 2. Move the magnets around the containers in different ways.
- 3. Analyze the force that you can observe and record it in your data table.
- 4. Return ALL material back to the bucket for the next team.



Materials:

Rubber band, Meter Stick,

- 1. Place a rubber band on the end of a meter stick.
- 2. Without letting go, stretch the rubber band 10 cm and **strum** the rubber band to observe the **sound** and material.
- 3. Repeat step 2 trying to stretch 20 cm, 30 cm, and 50 cm
- 4. Analyze the force that you can feel, and hear and record in data table.
- * Do NOT launch the rubber band at anyone or anything***
 - Violators will walk the plank and receive a zero for the entire lab along with the rest of the group
- 5. Return ALL material back to the bucket for the next team.



Materials:

iPad Camera (selfie mode), balloon, your head or arms

Directions:

- 1. Observe your hair.
- 2. Rub the balloon on your head or exposed arms, then lift the balloon up.
- 3. Observe your hair again.
- 4. Analyze the force that you can see, laugh at and record your observation.
- 5. Take only 1 picture per student with the iPad
 - ***This is meant to be fun, Please Do not ruin it for everyone else by getting carried away and do NOT mess with the other pics***
- 6. Return ALL material back to the bucket for the next team.

Station 4

Materials:

Tennis ball, Lacrosse ball, your hands

- 1. Hold both objects about shoulder height.
- 2. Release each ball at the same time
- 3. Repeat steps 1-2 a few more times
- 4. Analyze the force that you can see and record in your data table.
- 5. Return ALL material back to the bucket for the next team.



Materials:

Blow Dryer, Pinwheel, Ping Pong Balls

Directions:

- 1. Hold the wheel in your hand. Observe its motion.
- 2. Gently blow on the pinwheel. Observe its motion.
- 3. Wave it through the air (carefully)
- 3. Repeat steps 1-2 three more times.
- 4. Analyze the force that you can see and record in your data table.
- 5. Return ALL material back to the bucket for the next team.
- 6. Turn the blow dryer pointing up and add the ping pong ball(s) to its path. (also optional)
- 7. Repeat steps 4 and 5.

Station 6

Materials:

30 dominoes, your hand

- 1. Set up three tracks of dominos, each track should have a different spacing.
- 2. Predict which one will win the race.
- 3. At the same time, knock the first domino of each track and observe who falls fastest.
- 4. Analyze the force that you can feel, hear, and see and record.
- 5. Return ALL material back to the bucket for the next team.



Materials:

8 Bocce Balls, 1 white target ball, play area

Directions:

- 1. Each student pick a color (2 balls each).
- 2. Within the stakes, toss the white target ball underhand 15-20 feet away.
- 3. Next, from the start line, each player takes a turn to roll their ball closest to the target. Go two rotations so each player rolls both balls.
- 4. Whichever color was closest wins!!
- 5. After the match, think about the force that ultimately controlled the game.
- 6. Record the necessary information in the data table.
- 7. Return all of the equipment to the bucket for the next team

Station 8

Materials: Beaker of water, cork, rubber stopper, finger

- 1. Hold the objects in your hand and observe them.
- 2. Put both cork and stopper in the water and observe its motion.
- 3. Push on the top of the cork, let go, and observe its motion.
- 4. Analyze the force that you can feel and see and record your observation
- 5. Return ALL material back to the bucket for the next team.





Materials:

Low-Friction Car, Electric Fan, Counter Top

- 1. Place the car on the countertop, push and release; observe its motion.
- 2. Attach the fan to the top of the car; turn on the fan.
- 3. Place the car back on the countertop, lightly push in the opposite direction of the fan's blowing.
- 4. Observe the car a few seconds after your push.
- 5. Analyze the forces that you see at that point.
- 6. Write down your observations and analyses on your lab worksheet

