

Physics Lab: Center of Gravity

Student Name: _____

Date: _____

Objective

To perform various activities to better understand the concept of Center of Gravity and to determine each student's individual center of gravity (mass)

Procedure 1: "Win by a Nose"

Kneel on the floor with legs folded underneath. Place elbows at knees and extend arms. Place a white-board marker at the tip of your fingers. Sit back up on your knees and lock your fingers behind your back. Now try to bend forward and knock over the marker with your nose.

Results: Record your observations

Procedure 2: "Backed against a wall"

One student stands with their back straight against the wall. Place a coin on the floor at their feet and tell them to pick it up.

Results: Record your observations

Procedure 3: "Lean on Me (or a wall)"

One student will stand with one side (leg and arm) pressed tightly against the wall. Have them try to lift the outside leg straight out from the wall.

Results: Record your observations

Procedure 4: "Potatoes and Center of Gravity"

Using 2 forks, a piece of potato and a toothpick, find and demonstrate the center of gravity to your teacher by finding the balance point on the toothpick.

Results: Record your observations