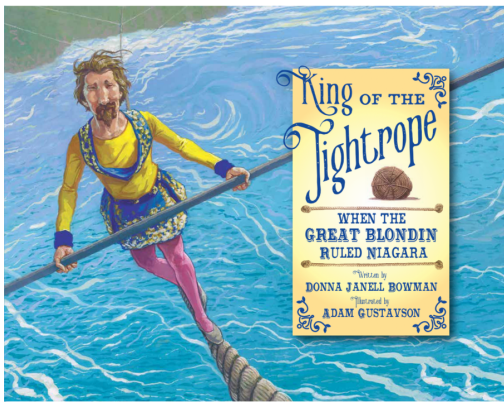


Demonstrating the STEM of Tightrope Walking: Center of Gravity



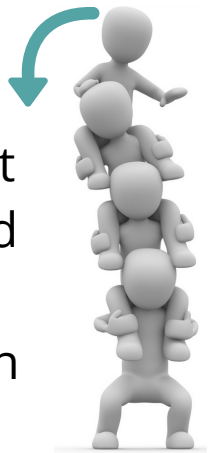
Experiment #1

(Hint: Lowering your center of gravity adds stability)

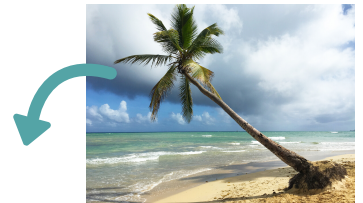
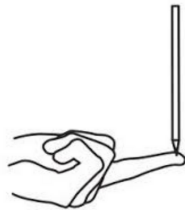
Step One: Stand up straight

Step Two: Keeping your feet in place, lean to one side until you begin to topple over. Gravity tries to move your farthest point, your head, toward the ground by pivoting you around your own ankles in a circular motion.

Step Three: Sit in a chair and see how much farther you can lean



Experiment #2



Balance an upright pencil on your finger.

Strategically attach ~6-inches of thin, shapeable craft wire OR a pipe cleaner and two clothespins OR washers to the pencil to lower the center of gravity and distribute the mass, allowing balance.

(Hint: Think of a balance pole)

