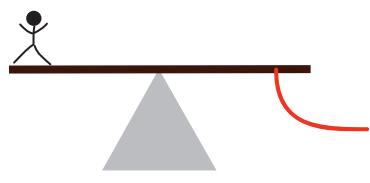


LEVERS, PULLEYS, AND MECHANICAL ADVANTAGE

This activity will help you to learn about how powerful levers and pulleys can be! When we use tools such as levers and pulleys to help reduce the force required to do work, we are applying *Mechanical Advantage*. Here, we have a set of images showing our system, set up in different ways. Our goal is to lift the person on the left. First, make a hypothesis about which you think will be easiest (require the least force) to lift by pulling the rope. Then, using the teeter-totter, try out each one to see whether you are correct! Your teacher will provide a spring scale for you, so that you can measure.



Hypothesis _____

Actual force required _____

