



# Write a story!

You need the following “pictures” in your project:

- **Free-body diagram (5 points)**
  - **FORCE Vectors**
    - Use RED VECTOR ARROWS: Arrows with magnitude (**size of arrow**) and direction of ALL FORCES acting on the object
    - Label each arrow with the force represents (friction, gravity, air resistance, normal, or applied)
    - NET FORCE on the object. You may just calculate whether net force = zero or if net force > zero.
    - If the net force is greater than zero, use a YELLOW VECTOR ARROW to draw and label the direction of the net force.
  - **MOTION Vectors**
    - BLUE CONSTANT VELOCITY VECTOR ARROWS or
    - GREEN ACCELERATION VECTOR ARROWS
    - The size of these arrows also represents the magnitude of the motion.
- **Velocity Graph (position vs. time) (5 points)**
- **Acceleration Graph (velocity vs. time) (5 points)**