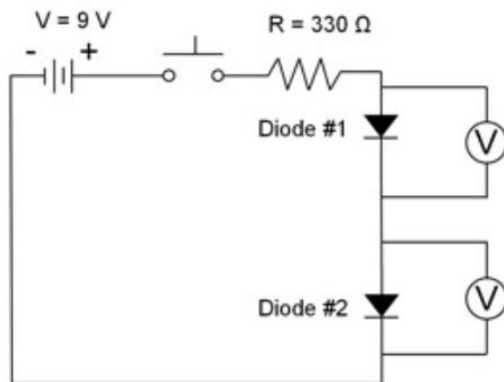


NTI: Day 1

- Centroids:
 - ✓ Find the centroid of a rectangle measuring 10.5in by 7in.
 - ✓ Find the centroid of a right triangle with dimensions $b = 30\text{cm}$ and $h = 12\text{cm}$.

NTI: Day 2

- Electrical Circuits:
 - ✓ Describe the flow of electricity and each component in the following circuit schematic. (You were given a handout that describes each symbol.)



NTI: Day 3

- Compound Machines:
 - ✓ Think back to our Rube Goldberg machine class project. You are to write me a 1 page paper detailing three things. (1) What is one thing you could have done to improve your group's machine? (2) What is one thing that could have been done to improve another group's machine? (3) Overall, what could have made this project run smoother? Explain each answer.

NTI: Day 4

- Free Body Diagrams:
 - ✓ Draw a free body diagram for the following illustration. Record your assignment in your engineering notebook. (Ignore the gray lines in the picture. They have nothing to do with the forces.)



NTI: Day 5

- Recycling:
 - ✓ Using two recyclable items in your house (shampoo bottle, plastic bag, cereal box, etc), brainstorm ways you could use the two objects together to achieve a goal or do a job. In other words, how can we reuse these two items together in order to prevent them from being thrown in the trash. Record your brainstorming ideas and final product sketch in your engineering notebook.