Newton’s Laws are Everywhere

Project Guidelines:

* Research an activity or phenomenon that occurs in nature that you can relate to **all three of Newton’s Laws of Motion**. You will then write a paper incorporating the physics that apply followed by making a poster, or producing a skit or video.
* Write a 3 - 4 page summary (double spaced/ Times New Roman/12 point font)
  + Include:
    - How Newton’s three laws of motion apply to this activity or phenomena?
    - Include theory, calculations and diagrams, drawings and/or pictures where appropriate. **This especially applies to Newton's 2nd Law.**
    - How has learning about Newton’s Laws of motion changed your perspective on this activity or phenomena?
* Produce a poster, skit or video on your project.
  + - Poster should include pictures, diagrams and a short description of your activity or phenomena. Also included on the poster should be some reference to how Newton’s three laws apply to the activity, including any pertinent formulas used.
    - Skit or video should include clear connections between the activity or phenomena shown, and how it relates to **ALL THREE** of Newton’s Laws of motion.
* Grading Policy (20 Points Total):
  + **3 – 4 page summary:** **50 points**
    - **Excellent work** **(50 points)** This work is characterized by comprehensive answers to all of the questions. Use of diagrams and calculations clearly support the concepts and are well integrated into the written summary.
    - **Good work** **(30-40 points)** Most questions are answered, but lacks the full comprehensiveness of excellent work. Diagrams and calculations are used to help support the written summary, but may not be as well integrated as excellent work.
    - **Fair work** **(20-30 points)** Work is characterized by limited summarization of the questions where the use of diagrams and calculations (if present) are not well integrated.
    - **Incomplete or Unsatisfactory work** **(0-10 points)**. Work shows an overall general lack of effort.
  + **Poster, Skit, Video:\*** **50 points**
    - **Excellent work** **(50 points)**. Work is characterized by the use of clear diagrams, images and/or drawings connected to a clear and concise description of your area of interest. The overall appearance is neat and pleasing to the observer.
    - **Good work** **(30-40 points)**. Diagrams, images and/or drawings are relevant to the subject matter, but may not be well connected to the description. Overall appearance is generally neat and pleasing to the observer.
    - **Fair work** **(20-30 points)**. This work is characterized by the use of few diagrams, images and/or drawings that do not necessarily connect well with the short description. Overall appearance reflects some effort, but not to the same degree of good or excellent work.
    - **Incomplete or Unsatisfactory word** **(0-10 points)**. Work shows an overall general lack of effort.
* Assignment Due Dates:
  + 3 – 4 page summary: January 10, 2020
  + Poster, Skit, Video: January 17, 2020

***\*This is a group project. Posters are limited to a maximum of two people, while videos are limited to three***.