

## **STEM My Ride**

### **Summer Camp Project Based Learning**

**Objective:** Students will design a car based on change in design over time.

Students will be able to understand the engineering design and the parts to build a mousetrap car based on their assigned decade.

#### **Final Presentation should include:**

- Title Slide
- Cultural Influence
  - Defining characteristics
  - What aspects are included into the design of your car
- Decade Timeline
  - Change in design - what has changed to present day
- Math and Engineering Design
  - Circumference of tires
  - Mass of car
  - Blueprints with measurements
- Science-Data Collection and Analysis
  - Purpose/Problem to be tested (How does \_\_\_\_\_ affect \_\_\_\_\_?)
  - Hypothesis (If...then....because....)
  - Controls/Constants and Variables
  - Data Table(s)
  - Graphs/Analysis
  - Conclusion (Was the hypothesis proven? qualitative and quantitative data, errors/ways to improve lab/car designs)
  - Questions for future lab ideas (impact when there is a change of terrain, change of car size, etc...)
- Annotated Bibliography and Fiske
  - One article per person in group
    - Correct MLA Citation
    - Five Sentence Summary using first and last sentence stems
  - Name of the vehicle
    - Chapter where you found the word
    - Definition of the word
    - Why you chose the word to name your car.