



Cosmic Club *Flawless Flight Paths* Standards (Grades 6-8)

Next Generation Science Standards (NGSS)

- **MS-PS2-1.** Apply Newton’s Third Law to design a solution to a problem involving the motion of two colliding objects.
- **MS-PS2-2.** Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.
- **MS-ETS1-1.** Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- **MS-ETS1-2.** Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
- **MS-ETS1-3.** Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

Colorado Academic Standards – Reading, Writing, and Communicating

- Evidence Outcomes - Students Can:
Use the relationship between particular words (for example: cause/effect, part/whole, item/category) to better understand each of the words. (CCSS: L.6.5b)
- Evidence Outcomes - Students Can:
Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. (CCSS: SL.7.4)
- Evidence Outcomes - Students Can:
Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. (CCSS: SL.8.1d)