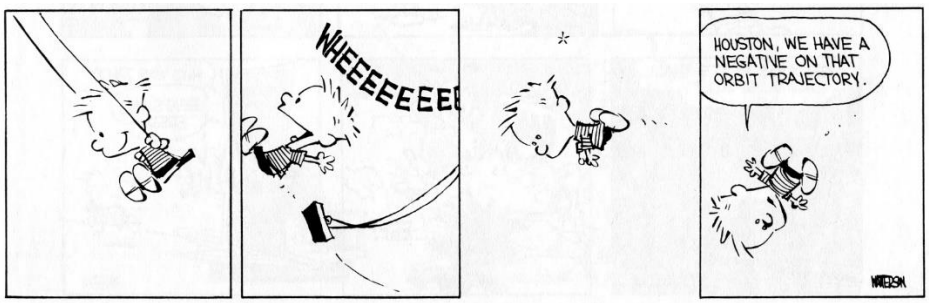
Name Due Date

College & Career Awareness
Pathway: Engineering/Skilled & Technical Trades
Pitsco Straw Rocket Launch



Overview: A rocket, as defined in Wikipedia, is a missile, spacecraft, aircraft or other vehicle that obtains thrust from a rocket engine. Most rocket engines carry propellants that are burned or combusted to give it thrust. A rocket moves forward by throwing this exhaust or burning gas backwards at a high speed. The earliest rockets date back to 13th century China when saltpeter or gunpowder was developed. Today, rockets carry payloads into space like communication satellite.

Essential question: What data would be most helpful to collect and analyze to discover the optimal form for achieving distance using the Straw Rocket Launcher?

Terms:

Force: Strength or power exerted upon an object
Motion: A change in position of an object
Thrust: To drive with force
Center of gravity: the place in a system or body where the weight is evenly dispersed and all sides are in balance
Hypothesis: educated guess

Checklist

1. _____ Record input

2. _____ Watch video http://video.pitsco.com/default.aspx?vID=68&gID=-1

3. _____ in teams of 2-3 create a straw rocket using; straw, clay, cardstock, & tape (record your group by writing them and you group name on the white board)

4. _____ With each launch record points of data (REMEMBER - change **one** thing at a time, in order to keep track of the variable that is producing the results you seek.) Data points to include: length of straw, weight of nose cone, shape of nose cone, angle of launch, air pressure used, number of fins.

5. In your output, summarize which points of data best helped you to achieve the greatest length when launching the Straw Rocket Launcher. Include a graph that shows distance on the y axis and another data point on the x axis.

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