Apollo 13 Mission: *A successful failure.* (Dec 1st, 08-Jan 23rd, 09)

Week 1: TEKS 6.13 concept and 6.13 (B), 6.3 (E)
(Dec 1-5)

- Introduction to space travel.
- Students will research the history of Rocketry with computer mobile lab.
- http://history.nasa.gov/ (click on topical index)

Week 2: TEKS 6.13 concept and 6.13 (B), 6.3(C)
(Dec 8-12)

- Engineering Design Challenge. Design, build and test a launch platform. We may encounter a successful failure.
- http://science.ksc.nasa.gov/facilities/mlp.html
- http://www-pao.ksc.nasa.gov/kscpao/nasafact/count3teaf.htm
- http://www-pao.ksc.nasa.gov/kscpao/shuttle/countdown/sts110/leak- vid.htm
- http://academy.grc.nasa.gov/2008/group-project/new-launch-technologies-for-small-satelittes-a-proposal-for-a-balloon-assisted-launch-system

Week 3: TEKS 6.5 concept, 6.5 (A) & (B), 6.13 concept and 6.13 (B), 6.2 (C), 6.6(A),
(Dec 15-19) 6.3(C)

- Systems: What types of rockets will do the job for what we need. Research a design to suit our purpose.
- Rocket parts and motion.
- Forces on model rockets. Newton's laws of motion.
- http://exploration.grc.nasa.gov/education/rocket/rktfor.html
- http://www.nasa.gov/pdf/153415main_Rockets.Guide.Principles.pdf
- http://www.lerc.nasa.gov/WWW/K-12/airplane/guided.htm

Week 4: TEKS 6.5 concept, 6.5 (A) & (B), 6.13 concept and 6.13 (B), 6.2 (C), 6.6(A),
(Jan 7-9) 6.3(C)

- Build a rocket and launch utilizing the R2K model (Pasco).
- Modify and test design if needed.
- http://adc.gsfc.nasa.gov/adc/education/space_ex/2liter.html
- http://www.nasa.gov/centers/kennedy/launchingrockets

Week 5: TEKS 6.3 (A), (E)
(Jan 12-16)

- Engineering design challenge: Seeds in Space.
- Glove Box experiment.
- http://spaceflight.nasa.gov/shuttle/reference/factsheets/food.html
- http://www.nasa.gov/vision/space/features/misse_basil.html
- http://www.nasa.gov/pdf/190540main_Food_Selection.pdf

Week 6: TEKS 6.3(D)
(Jan 19-23)

- Student will research NASA careers , construct a resume for a particular job application.
- RLN on careers at NASA.
- http://www.nasajobs.nasa.gov/studentopps/employment/default.htm
- http://jobs.arc.nasa.gov/text/student/college.html
- http://www.nasa.gov/audience/forstudents/9-12
- http://education.nasa.gov/divisions/eleandsec/programs/ele_sec_stu_programs.html