

TECHNOLOGY ACTIVITY

Lunar Acid Rain Shelter

NATIONAL STANDARDS

- #3 – Develop an understanding of relationships among technologies and the connections between it and other fields
- #6 - Develop an understanding of the role of society in the development of technology
- #8 - Develop an understanding of the attributes of design
- #9 - Develop an understanding of engineering design
- #10 - Develop an understanding of troubleshooting, R & D, invention and innovation, and experimentation in problem solving
- #11 - Develop abilities to apply the design process
- #20 - Develop an understanding of and be able to select and use construction technologies

NATIONAL BENCHMARKS

(Grades 9-12)

- #3 – H
- #6 – D
- #9 – I,J,K,L
- #10 – J,K,L
- #11 – M,N,O,P,Q,R
- #20 – K,N

(Grades 6-8)

- #3 – F,E
- #6 – H,I
- #9 – F,G,H
- #10 – F,G,H
- #20 - H,G,I

ACTIVITIES

- Students will work in teams, brainstorm, design and develop a structure following prescribed parameters.
- Students will communicate using sketches, verbal, quantitative, and experimentation to develop ideas.
- Students will develop designs using past experience and exposure to building construction and applying to current problem given.
- Students will develop structures using prefabricated struts

SHOW ME STANDARDS

Performance Standards:

- Goal #3 – 1,2,3,4,5,6,7
- Goal #2 – 2,3
- Goal #4 – 5,6,7

Knowledge Standards:

- Comm Arts – 6
- Mathematics – 2,4
- Science - 7

ASSESSMENT

- Group worked cooperatively as a team
- Shelter was able to hold all members of group comfortably
- Communication between team members was on task at hand only
- Parameters were met/followed in construction of shelter
- Clean-up was done to satisfaction of teacher