

Space Radiation - 2013

One of NASA's largest concerns is the effect of radiation on sensitive payloads and humans.

Utilize the mission lifecycle template to design a radiation shield prototype with attention to the established criteria and constraints of the NASA Exploration Design Challenge. Demonstrate the use of SWOT analyses to defend your decision making process throughout the design development. Use 3-D software to demonstrate the scientific principles behind your design.

NASA Exploration Design Challenge
Near Space Radiation ~ by Andrew McBride, et al.

| Language Arts | Science | Social Studies | Technology |
|---|---|--|--|
| BOE: Functional Feasibility study Persuasive speaking Research Prioritizing sources Listening skills Literature | How do scientists know what they know about the Solar System? Properties of elements and composition of matter in the universe Spectrometry Origin and formation of the solar system Laws of motion Electromagnetic spectrum and radiation | Exploration and progress in history Politics of science Cooperation and competition among nations in space exploration | How is animation used to better presentation? What animation programs are available online? Multi-perspective thinking |