Results of the Magnetorquer Wrapping

The lesson plan that was created during this internship is based on field work conducted through reading various books, articles, and engaging in various training workshops. Through the activities outlined in this lesson plan students and teachers gain an insight about the satellites and magnetorquer wrapping and the impact they have on everyday human living. The lesson plan includes a short article, worksheet, and hands-on project that students complete to help them better understand satellites and magnetorquer wrapping and their relationship to each other and to human lifestyle.

Included in the lesson plan:
- Lesson Description
- Performance Expectations
- Phenomena
- Essential/Driving Question
- Specific Learning Outcomes
- How they will be assessed
- Science & Engineering Practices
- Disciplinary Core Ideas
- Crosscutting Concepts
- Lesson Integration
- Lesson Relevance
- Lesson Opportunities
- Build Knowledge

Activity included in the lesson plan:
- Short Article
- Discussion
- Worksheet
- Design their satellite
- Create their satellite

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References


Conclusions
As a teacher-in-training it has been invaluable to engage in scientific research. In-class observations has significantly influenced my understanding of how people learn and my capacity to communicate effectively. When shallowing a veteran teacher, I noticed children were highly interested and more engaged when they were able to touch relevant objects. In addition, I noticed the importance of color and purposeful lessons that make things interesting. It was clear that 4th grade students love to be actively engaged, which in turn motivated me to develop a hands-on activity. The goal of this project was to teach 4th grade students about the power of satellites and their importance in our lives. The hands-on activities combined with the illustrated booklet will help teachers do so effectively.