Using MY NASA DATA in the Classroom  
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Approach

- Students first worked with the resource activity cards provided by the Globe Program at NASA. These cards allowed the students to see patterns in global temperatures, ice cover, sea surface albedo and other parameters.
- Preston Lewis from NASA visited my classroom and guided the students through one of the lesson plans.
- The students chose a lesson plan and began looking for background information about the subject.
- Anne Martin and Preston Lewis spoke into the classroom for the purpose of answering questions about particular problems the students were having.
- Anne Martin, Preston Lewis and Dr. Jacob Joseph visited the classroom to help the students with interpreting the graphs they made using the downloaded data from the MYNASADATA site.

Rationale

What separates STEM from the traditional science and math education is the blended learning environment and showing students how the scientific methods can be applied to everyday life. It teaches students computational thinking and focuses on the real-world applications of problem solving. STEM lessons immerse students in hands-on inquiry and open-ended exploration. In STEM lessons, the path to learning is open ended, within constraints such as available materials. The students’ work is hands-on and collaborative, and decisions about solutions are student-generated. Students communicate to share ideas and redesign their prototypes as needed. They control their own ideas and design their own investigations.

Most High School STEM Programs are directed toward high achieving students who are interested in STEM studies. These opportunities are not afforded to many capable students. High school students in the state of Virginia are required to have 3 prototypes as needed. They control their own ideas and design their own investigations.

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