Constructing Explanations and Designing Solutions

What does it look like? Students examining data, manipulating models and identifying evidence from which explanations are developed for processes and phenomena that occur in science, giving credence to previously studied scientific theories.

Progression: From the start students should be given the opportunity to conduct investigations that will enable them to develop explanations for why or how things occur as they do in science. As they advance their investigations should take on more complexity incorporating manipulation of variables to determine cause and effect relationships.

MY NASA DATA Lessons

- Seasons (Grade 3-5)
- Tracking Ocean Ecology with Chlorophyll A (Grade 4-6)
- Coral Bleaching in the Caribbean (Grade 5-12)
- Sea Surface Temperature Trends of the Gulf Stream (Grade 6-12)
- Tropical Atlantic Aerosols (Grade 8)
- Using MY NASA DATA to Determine Volcanic Activity (Grade 8-12)
- Hurricane Frequency and Intensity (Grade 9-12)
- Hurricane Research (Grade 9-12)
- Nutrients in Chesapeake Bay (Grade 9-12)