

## Freshman Science – Physical Science

### Week 1 Academic Expectations 4.1 – 4.6

- Students are introduced to the Freshman Academy and Freshman Science.
- Expectations for behavior and assessment are introduced.
- Students are placed in lab groups for group activities.
- Students are given a Collaborative Work Skill Rubric to be used throughout the year for each activity.

### Week 2 Academic Expectations 4.1 – 4.6

- Students are introduced to the teacher web site.
- Students are instructed in the method of accessing information on the computer and so general websites that will be helpful in the future.
- Students are asked to access the teacher web page and respond to questions on the web.
- Students are introduced to the Scientific Method.
- Assessment is the response to the questions on the web page.

### Week 3 Academic Expectations 4.1 – 4.6

- Teach the Scientific Method.
- Use Smart Board presentations to help deliver the information with students taking notes.
- Discuss the different aspects of the scientific method and why each is critical in the overall development of a theory or law.
- Use united streaming as a resource for video on the scientific method:  
<http://www.unitedstreaming.com/search/assetDetail.cfm?guidAssetID=2A63EC31-9A53-4254-9ABF-1C5295A4A26D>
- Lab activity: The Mobias Strip – Form a hypothesis, follow the procedure, analyze the data and form a conclusion based on analysis and observation. Students will work in lab groups for the activity.
- Assessment:
  - Turning point quiz
  - Collaborative work skills rubric

### Week 4 Academic Expectations 4.1 – 4.6

- Introduce measurement as a tool. Introduce mass, weight, volume and length as types of measurement.
- Use the smart board presentation to introduce measures and numbers associated with those measurements.
- Review the metric system prefixes and how to convert numbers in the metric system.
- Use the scientific method to form hypothesis and experiment.