

Overarching Driving Question

Why does the Moon's appearance always seem to change?

Follow-Up Projects

Groups	Sub-Driving Research Questions & Follow-up questions (aka sub-sub driving questions)
Orbiters	<p><u>What path is swept out by the Moon as it orbits the Earth as the Earth and Moon orbit the Sun?</u></p> <p><i>How is our moon's path similar to other moons?</i></p>
Anglers	<p><u>How does my Earthly location affect my lunar observations?</u></p> <p><i>Why do people in the Northern Hemisphere see the moon lit on the right with people in the Southern Hemisphere see it lit on the left?</i></p>
Stargazers	<p><u>How does light pollution (including moonlight pollution) affect my night sky observations?</u></p> <p><i>Are stars in the same location each night, or do they change position?</i></p>
Craters	<p><u>What can we learn by examining a lunar or planetary surface?</u></p> <p><i>What factors determine the distribution of impact craters in Earth's hemispheres?</i></p>

Components of the Project

- Sub-Sub-driving Research Question (student--generated question)
- Methods of Investigation and Data Collection
- Analysis of Data
- Data Representation
 - Graphs/Charts/ Models and/or Technology-generated Visuals
- Results and Conclusions
- Follow-up Question

Pick your group!
Working from 10:30 –
to Noon

Orbiters

Anglers

Stargazers

Craters

- On memo paper (on wall) – select one of the groups for your follow-up project work.
- Each group will conduct a unique benchmark lesson that is specific to the project work.
- The maximum number within each category is 7.

Milestone for your Follow-Up Moon Project Work

**Blog your data representation
by August 28th**

By August 28th (Be prepared to share)

- Within our blog environment, please upload your sub-sub driving question and a representation of your data collection thus far. It can be the form of a table, a plot/graph, a model, etc.
- Provide a summary of your data and describe your data representation.
- Each person will be required to respond with at least one question and/or comment per data representation of others' group projects. Please respond to posting by September 4th.

Milestones for your PBI Units

Your PBI Units

By August 28th (Be prepared to share)

- 1 Benchmark Lesson that utilizes technology
- 1 type of Assessment
- Locate, read, and summarize one article concerning misconceptions about your unit's topic. This should be done by each person in your group of 3 or 4.
- We will create a blog thread for you to input this info to the group by the August 28th date.

By December Meeting

- Complete Unit
 - Overarching Goal
 - Driving Question
 - STEM Standards and Practices (and Crosscutting Concepts)
 - Potential Student sub-driving questions
 - Benchmark Lessons (at least three with one utilizing technology)
 - Formative and Summative Assessments (Milestones)

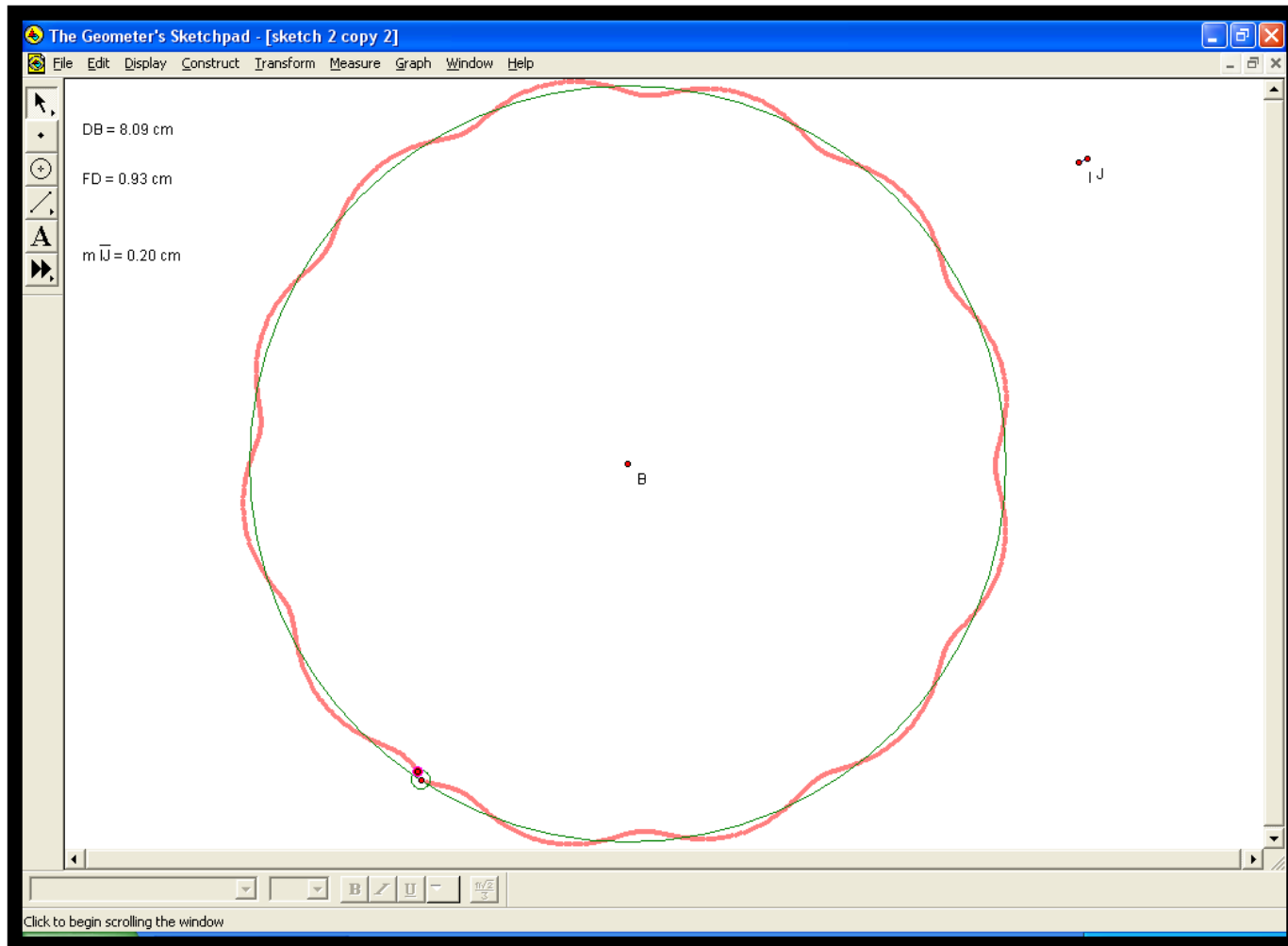
Resources for PBI Unit Construction

Chapter Readings – Please read and reflect

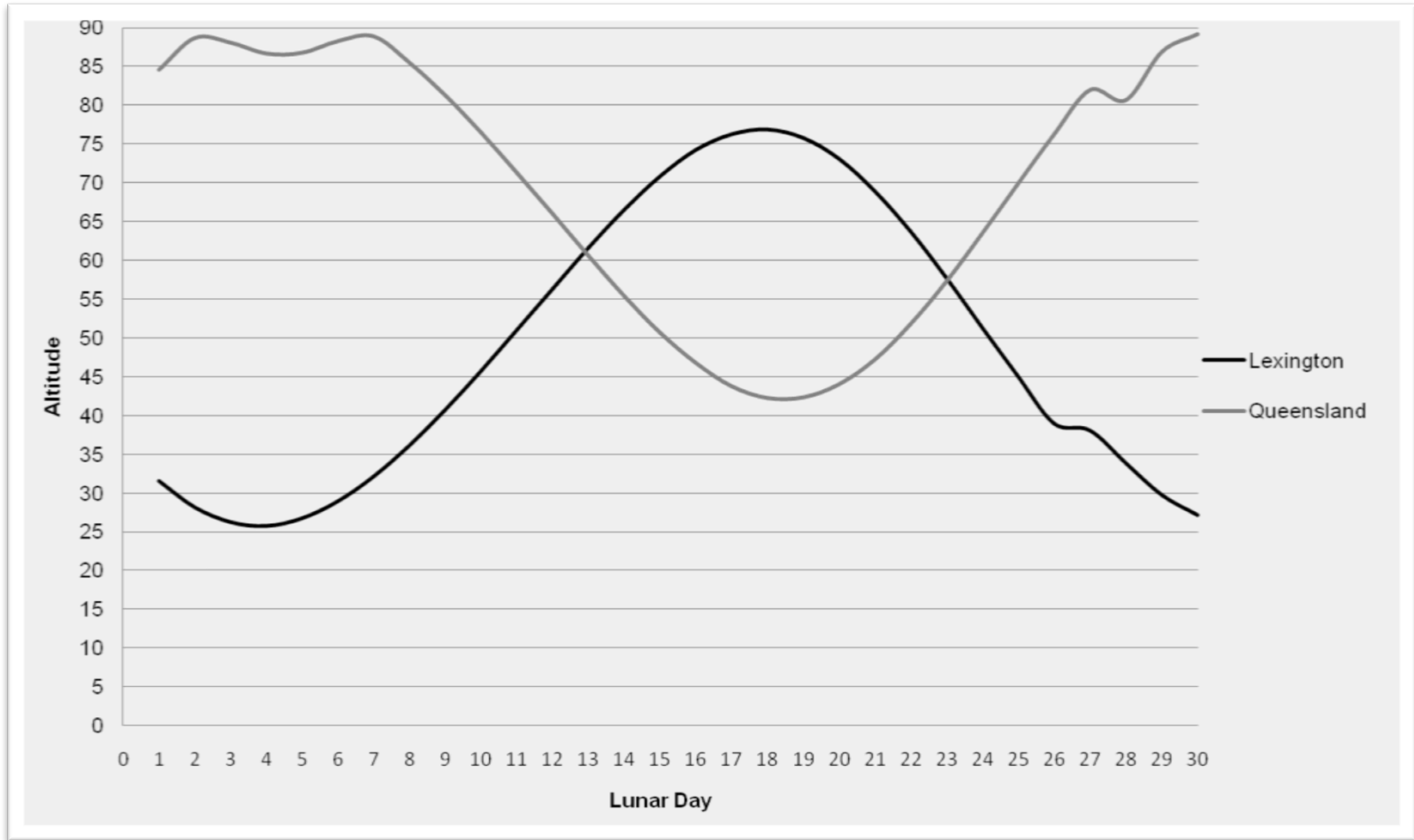
By September 4th

- Please read from the Krajcik and Czerniak book
 - Chapters 3 – 5 (pages 53-145)
 - Beginning September 4th a blogging discussion thread will be created for chapter reflection and discussion.

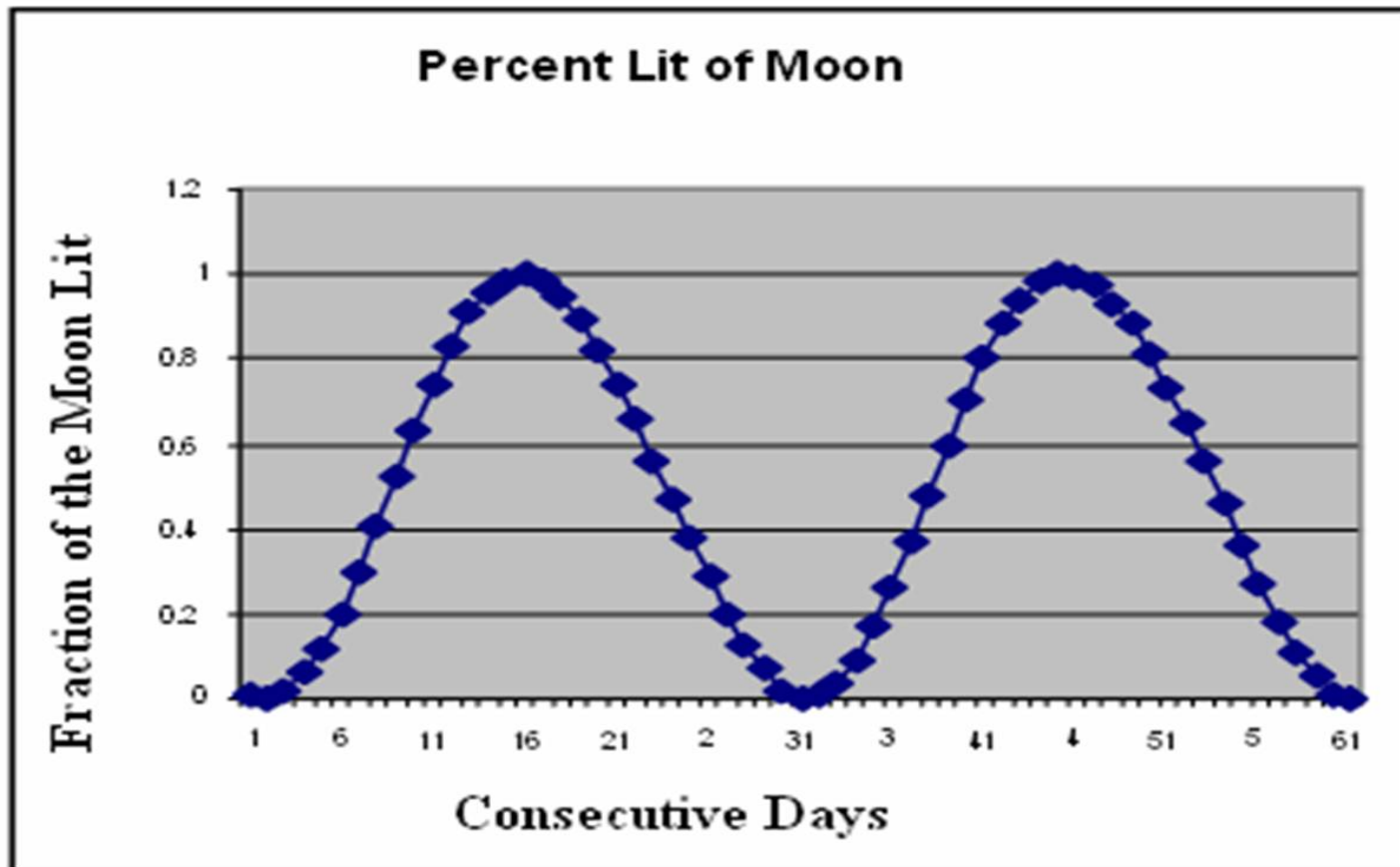
Orbiters



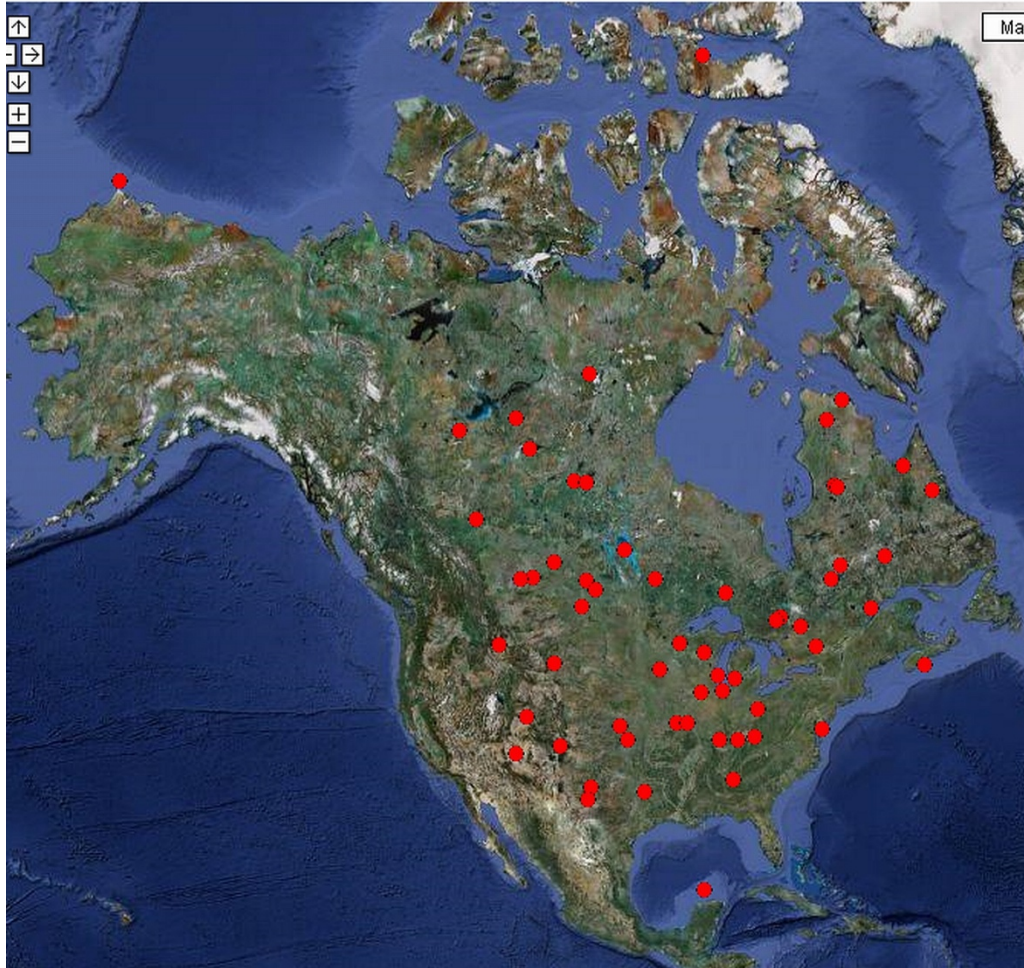
Anglers



Stargazers



Craters



Earth Impact Database - <http://www.passc.net/EarthImpactDatabase/NorthAmerica>

Thank you!

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