

Inventors/Pioneers Science Week 1 Lesson Plan

Friday, August 26, 2016

Then God said, "Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years; and let them be for lights in the firmament of the heavens to give light on the earth"; and it was so. Then God made two great lights: the greater light to rule the day, and the lesser light to rule the night. He made the stars also. God set them in the firmament of the heavens to give light on the earth, and to rule over the day and over the night, and to divide the light from the darkness. And God saw that it was good. So the evening and the morning were the fourth day. – Genesis 1:14-19

Class Overview: Apologia Astronomy, Chapter 1, Week 1 of 2

Students will have read pages 13-24 and Read Genesis 1:1-9, 1:14-19 and will have spent 15 minutes counting # objects in Night Sky ad how many are moving

- Prayer
- Introduction
- Class Overview
- Course Expectations, including materials needed to bring every week; progress report
- Assignment Explanation: two quizzes per semester; Semester exams (take-home)
- Collect homework assignments
- Astronomy Week 1 Content
- A. Read bible verse**
- B. Define Astronomy – astron – star or aster (the flower) and study or laws of**
 - **Oldest of the natural sciences – why is that?**
- C. Class discussion:** How many objects did you see when you observed the Night Sky recently?
Was it hard to count the stars and remember which ones you had counted?
 - Objects you saw include stars and planets, possibly even a galaxy
 - How many moving objects did you see? What were they?
- D. What is the purpose of all these bright objects? Answer: Signs and Seasons**
 - Signs for navigation: some birds, sailors & explorers
 - Seasons: man, or planting, hunting, preparing for the season ahead
- E. Clocks and Calendar activity: pick a "clock" outside**
 1. Cardinal direction determination; field expedient method

http://www.armystudyguide.com/content/army_board_study_guide_topics/land_navigation_map_reading/field-expedient-methods-of-determining-direction.shtml

- At the beginning of class place the pole and mark shadow for west; record time
- With 15 mins left return to pole and mark shadow for east
- Draw east-west line
- With west on left hand draw out the other cardinal directions
- 2. Latitude = 46.73 degrees north latitude; this means north of the equator
- 3. Sundial

<http://www.skyandtelescope.com/astronomy-resources/how-to-make-a-sundial/>
http://d366w3m5tf0813.cloudfront.net/wp-content/uploads/sundial_n.pdf

F. Assignments for next week