

8th Grade Earth Science

Course Content: The course content is based on the Minnesota State Science Standards and the BMS Earth Science Curriculum.

- A. History and Nature of Science
- B. Astronomy
- C. Oceanography
- D. Geology
- E. Meteorology
- F. Engineering
- G. Scientific Literacy

Course Objectives:

1. The student will understand that science is a way of knowing about the world that is characterized by empirical criteria, logical argument and skeptical review.
2. The student will understand that scientific inquiry is used by scientists to investigate the natural world in systematic ways.
3. The student will use multiple skills to design engineering solution and/or conduct scientific investigations.
4. The student will know that science and technology are human efforts that both influence and are influenced by civilizations and cultures worldwide.
5. The student will understand how scientific discovery, culture, societal norms and technology have influenced one another in different time periods.
6. The student will identify Earth's composition, structure and processes.
7. The student will investigate the impact humans have on the environment.
8. The student will investigate how the atmosphere interacts with the Earth system.
9. The student will compare objects in the solar system and explain their interactions with the Earth.
10. The student will describe the composition and structure of the universe.

Content Activities/Projects:

- A. Famous Scientists/Periodic Table/Ocean Floor Exploration/Minnesota Mining
- B. Create a Constellation/Planet Projects/Mars Landers/Star Lab
- C. Starfish Dissection/Ocean Posters/Salt Water Density/
- D. Rock and Mineral Identification/Geologic Time Tables/Age Dating
- E. Weather Maps/Weather Brochures/Weather Demonstration
- F. Spaghetti Structures/Newspaper Towers/Lego Lab
- G. Labs/Textbook Selections/Newspaper Selections/Selected Reading

Grading:

Tests
Projects
Labs
Daily Work