

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 1996 Volume VI: Selected Topics in Astronomy and Space Studies

The Solar System and Space Technology

Guide for Curriculum Unit 96.06.10 by Eddie B. Rose Jr.

In this unit students use knowledge and skills they have gained through their study of science, mathematics and other subject areas. Students are presented with several source materials (e.g. maps, charts or graphs, newspaper or magazine articles on various space technology) related to a significant issue. Students begin with a discussion about the solar system. The purpose of this collaborative activity is to give students the opportunity to begin thinking about the solar system and to share their ideas with others before starting the task. They read the source materials to gain information about the solar system and to consider various perspectives on the issue. Students then use the information they have gained from their readings as well as their prior knowledge to take a position on the issue. They will participate in a persuasive writing project in which they will state their position and support it with information from the source materials.

The content of Solar System and Space Technology is presented in a modularized, individualized problem-solving scientific/mathematics packet which can be adapted for grades K-12. Contents of the packet focus on space exploration and its relationship to science and mathematics. The curriculum is design to integrate reading, writing, and collaborative science and mathematics activities. The intended outcome is to enable students to demonstrate and interpret steps used to attain solutions for scientific problems.

In today's quickly changing world, students need to have the ability to think critically, solve problems, make decisions and communicate their ideas to others. The purpose of this curriculum is to develop students' ability to apply these skills in a realistic and interdisciplinary context. This curriculum unit was developed with the Connecticut Mastery Test and CAPT Test in mind.

(Recommended for General Math, Math Application, and Problem Solving, grades K-12)

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