

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 2007 Volume III: The Physics, Astronomy and Mathematics of the Solar System

## **Voyage to the Planets**

Guide for Curriculum Unit 07.03.03 by Nicholas R. Perrone

This unit gives students an opportunity to research the eight common planets, dwarf planets, and the Sun in our solar system. The unit is an inquiry-based WebQuest requiring students to work in teams to research one celestial object. They use their research to create a computer slide show presentation as well as a model of a planetary probe to further explore their object. The WebQuest may be found at the following Internet address: http://www.spomonie.com/mrp/voyage/title.htm>.

In the Voyage to the Planets WebQuest, student groups will take on real-life roles to research properties of celestial objects using computers connected to the Internet. They will use their research and create a computer slide show presentation to give to the rest of the class at the end of the project. Each student will take on the role of astronomer in their research during the unit; in this role he will imagine what an astronomer would need to know about his topic. Other individual roles include the planetary scientist, who will become an expert in the physical properties of the celestial object; the aerospace engineer, who will design and build the probe model that will investigate the celestial object; and the expert in celestial mechanics, who will research the movements and gravitational forces of the object.

(Developed for Science Class, grade 5; recommended for Astronomy and Solar System, grades 4-6)

## https://teachersinstitute.yale.edu

© 2021 by the Yale-New Haven Teachers Institute, Yale University For terms of use visit <a href="https://teachersinstitute.yale.edu/terms">https://teachersinstitute.yale.edu/terms</a>