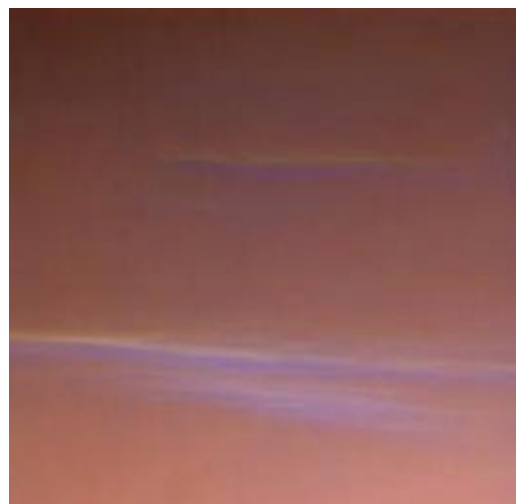




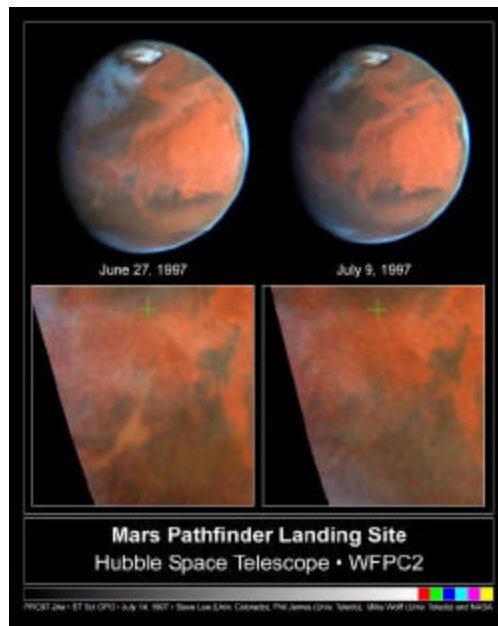
Mars Geography: Atmosphere Composition

By: Elisabeth Ambrose

Mars' atmosphere is composed mostly of carbon dioxide, which accounts for 96% of the total. The rest of the atmosphere is nitrogen, and argon, with very small amounts of oxygen. Mars has a very thin atmosphere; it is 200 times less massive than the atmosphere on Earth. It would not be possible for people to breathe on Mars – not only is the atmosphere very, very thin, there is not enough oxygen. However, it is thick enough to allow a parachute to slow an incoming spacecraft. Mars also has clouds and dust storms, as visible in the pictures below.



Clouds in the Martian atmosphere. NASA/JPL.



Clouds and Storms on Mars. NASA/JPL.

The Benchmark Lessons were developed with the help of the following sources:

Bill Arnet's "The Nine Planets" website, <http://nineplanets.org>

Chaisson, Eric, and McMillan, Steve. *Astronomy Today*. Prentice Hall, Upper Saddle River, New Jersey, 1999.

JPL's Planetary Photojournal, <http://photojournal.jpl.nasa.gov/>

Mars Pathfinder Science Results Directory,
<http://mars.jpl.nasa.gov/MPF/science/science-index.html>

The NASA Image Exchange, <http://nix.nasa.gov/>

Zeilik, Michael, Gregory, Stephen A., and Smith, Elske v. P. *Introductory Astronomy and Astrophysics*. Saunders College Publishing, Harcourt Brace Jovanovich C College Publishers, Austin, 1992.

Mission to Mars: Project Based Learning: Dr. Anthony Petrosino, Department of Curriculum and Instruction, College of Education, University of Texas at Austin,
<http://www.edb.utexas.edu/missiontomars/index.html>
Benchmarks content author: Elisabeth Ambrose,
Department of Astronomy, University of Texas at Austin
Project funded by the Center for Instructional Technologies,
University of Texas at Austin

