Mars Geography:
Crust Composition

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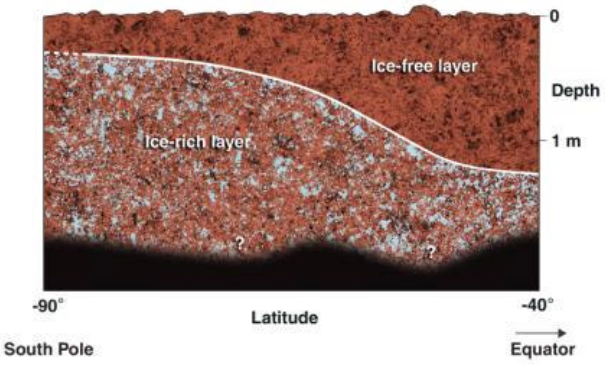
Mars' crust varies in thickness across the planet. In the northern hemisphere, the crust is only about 35 km thick, while in the southern hemisphere, it is about 80 km thick. This is probably caused by a period of uneven cooling that the planet experienced. For unknown reasons, Mars' Northern Hemisphere cooled more slowly than the Southern Hemisphere, causing it to form a smoother, thinner crust in that area.

This image shows a possible configuration of soil and ice in the first three feet of the surface of Mars.



Soil composition 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.

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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,
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Project funded by the Center for Instructional Technologies,
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