

Teacher's Guide to the 3-D Tour of the Solar System

Explanation of Contents and Structure of the CD-ROM

The CD-ROM contains the lessons for the Teacher's Guide to the 3-D Tour of the Solar System CD-ROM. The files can be viewed, searched, and printed using Adobe's Acrobat Reader. The Reader is included on the CD for all operating-system versions available at the time of production. **Note for Linux users:** The Linux version provided by Adobe does not have search capability; if you want additional information, please contact Adobe at <http://www.adobe.com>.

Installing the Reader

If you do not already have version 3.0 (or higher) of the Acrobat Reader with search capability (note exception for Linux version above), your first step should be to install the version of the Acrobat Reader contained on this CD. Go to the "ACROBAT" folder and find the subdirectory that corresponds to your computer's operating system. The choices are:

AIX (IBM AIX for Unix); **HPUX** (Hewlett-Packard HP-UX for Unix); **IRIX** (Silicon Graphics IRIX for Unix); **LINUX** (Linux for Unix); **MAC** (Macintosh and Power Macintosh); **SOLARIS** (Sun Solaris for Unix); **SUNOS** (Sun OS for Unix); **WIN31** (Microsoft Windows 3.1 for PC); **WIN95** (Microsoft Windows 95 for PC); **WINNT** (Microsoft Windows NT for PC).

For Unix operating systems, the install file is a compressed tar file. For the Macintosh and Microsoft Windows systems, the install files are self-extracting archives. After extracting the contents of the install file to your local hard drive, refer to the Adobe documentation for completing the installation. The Adobe Web site (<http://www.adobe.com>) also has the latest versions of the Reader and a complete list of system requirements for all operating systems listed above. If your operating system is not on the list, you may want to try the Adobe Web site to see if your operating system is now supported.

Organization of the Files

The root directory of the CD contains the following files and folders:

read files	"read_pc.txt", "read_mac.txt", and "readunix.txt" are simply three versions of the same file, which contain basically the same information given in this text. The table of contents file, contents.pdf contains links to all of the files.
"INTRO"	folder containing the table of contents for the entire collection, and the introductions (e.g., "intro.pdf", "equip.pdf" etc.)
"BASICS"	folder containing the table of contents for this section, Basics, and the individual lesson files (e.g., "basics.pdf", "depth.pdf", etc.)
"PLANET"	folder containing the table of contents for this section, Planetary Science, and the individual lesson files (e.g., "planet.pdf", "data.pdf", etc.)
"GEOLOGY"	folder containing the table of contents for this section, Planetary Geology, and the individual lesson files (e.g., "geology.pdf", "ident.pdf", etc.)
"APPENDIX"	folder containing the individual appendices files (e.g., "spacecr.pdf", "glossary.pdf", etc.)
"ACROBAT"	folder containing installation files for the Acrobat Reader (see above)

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Table of Contents

To view a specific lesson, use the "grab hand" tool of your Reader to click on the name of the lesson. Use the arrow buttons to navigate within the lessons or return to the table of contents.

Introduction

- Title Page and Credits
- Introduction to the Teacher's Guide
- Equipment and Materials
- National Education Standards
- Introduction to the Lessons

Activities

Basics

- Depth Perception and Vision
- Stereo Imagery*
 - Stereo Images: Using Stereoscopes and View-Masters (the history of stereo imagery)
 - Stereo Images: Stereo Pairs (how to view and make your own 3-D images)
 - Stereo Images: Anaglyphs (red/blue 3-D images; how to make your own 3-D glasses)
 - Stereo Images: Stereograms (random-dot and autostereograms; how to use and make them)
 - Stereo Images: New Technologies (holograms, polarized 3-D, liquid crystal shutters glasses and virtual reality)
- Introduction to the Images*
 - Images: Introduction to the CD-ROM (how to use the CD-ROM)
 - Images: Introduction to the 3-D Slide Set (additional lesson)
 - Images: Introduction to the Tours (navigation and data retrieval)

Planetary Science

- The Solar System*
 - The Solar System: Data-based Activities (the planets and their moons)
 - The Solar System: Focus: Mars
 - The Solar System: Research Projects
- Planetary Science*
 - Planetary Science: Earth-based Research
 - Planetary Science: Comparing Planets to Earth
 - Planetary Science: Comparing Planetary Bodies
- Space Exploration*
 - Space Exploration: Mission to Planet Earth (the space shuttle)
 - Space Exploration: Planetary Missions (Mariner, Apollo, Skylab, Viking, Magellan, Galileo, and Pathfinder)
 - Space Exploration: Designing Space Missions

Planetary Geology

- Landforms and Processes*
 - Planetary Geology: Identifying Landforms and Processes
 - Planetary Geology: Comparing Different Planets
- Geologic Sequencing and History*
 - Planetary Geology: Geologic Sequencing and History (revealing the history of a planet; topography and superposition)
- Measuring Heights and Features to Scale*
 - Planetary Geology: Measuring to Scale (measuring features and distances)
 - Planetary Geology: Measuring Heights Using Parallax
- Geologic Processes*
 - Geologic Processes: Impact Craters (identifying crater features and measuring crater depths)
 - Geologic Processes: Volcanism (identifying volcanic features and processes)
 - Geologic Processes: Tectonics (identifying types of tectonic activity)
 - Geologic Processes: Fluvial and Eolian Erosion (erosion by wind water, ice and landslides)

Appendix

- Spacecraft Glossary
- Additional Resources
- NASA Educator Resource Centers
- Teacher's Guide Glossary of Terms
- Teacher's Guide Evaluation