

LANDFORMS MODULE

On the Welcome page, click Preview under the grades 3–6 flag to see a brief overview of the 3–6 site.

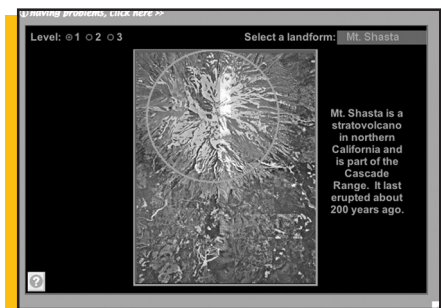
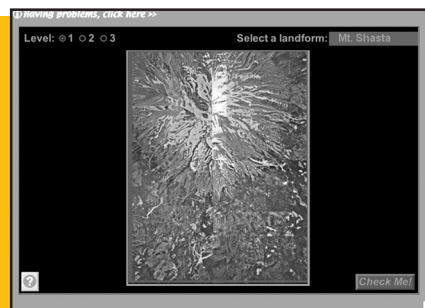
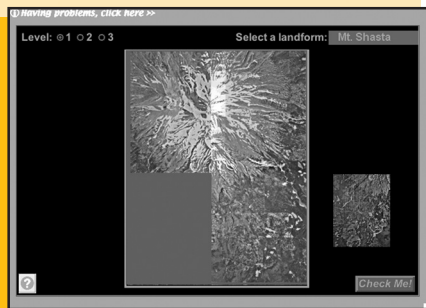
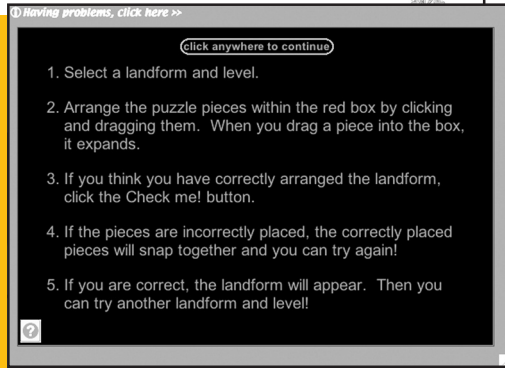
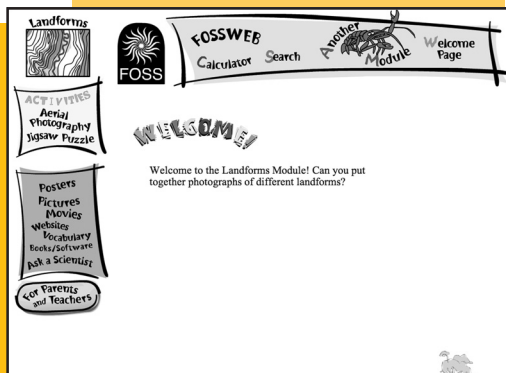
Click the grades 3–6 icon to get a menu that links to each of the 3–6 modules. There you can choose Landforms and travel to a wealth of information and activities specific to that module for students, parents, and teachers. The section for students has interactive activities, project posters, pictures, movies, websites, a vocabulary list, a list of books and software, and an “Ask a Scientist” section. Parents and teachers can go to a module summary, a link to home/school connections, resources, and tips and tricks for using FOSS in the classroom.

If possible, introduce FOSSweb to students using a computer connected to a large monitor or digital projector. After a group introduction, move students to the computer lab or to computer stations in your classroom. Students in grades 3–6 need to have an focus when they begin exploring FOSSweb on their own or in small groups. Consider using some of the following questions and ideas to get them started. You can allow more free exploration once students have learned how to use FOSSweb and have completed some introductory assignments.

In Landforms, you’ll find two activities: Aerial Photography and Jigsaw Puzzle. You can introduce these activities after students have completed Investigation 5, *Bird’s-Eye View*. In Aerial Photography, students view an animation about how aerial photographs are produced. You might ask,

- *What landforms and other features could we observe in the aerial photographs?*

Explain that scientists who use aerial photographs often use stereo pairs—two aerial photos of almost the same area that can be overlapped. Each photo contains a portion of the same land area.





Scientists use stereo glasses to view the overlapped area in three dimensions. Variations on stereo photography are used today, and computer technology has provided some new techniques to create the 3-D effect. Review the information on the introductory screen. Then click on the airplane to move to the animation.

In Jigsaw Puzzle, students assemble a puzzle of aerial photos for the landforms they have studied in this module: Mt. Shasta, Grand Canyon, and Death Valley. Review the information on the introductory screen. Click anywhere on the screen to move to the activity. Show students how to choose a level and landform. The higher levels require them to overlap the images. Show how to click and drag the images to the selected location and how to use the ? button. Have students move to a computer to try the activity on their own. After everyone has had a chance to try, discuss what successes and difficulties they had.

In Posters, students can view summaries of investigations or posters created by students for the end-of-module project. Students can also submit their own project posters to share.

In Pictures, students can view images of many landforms and water features, for example, the Mississippi River delta and the Great Lakes.

Movies include sequences of rafting rapids along the Colorado River in Grand Canyon, a volcanic eruption in Hawaii, and NASA videos about the global positioning system (GPS).

Websites include links to sites that can extend student experience with the **Landforms Module**. The links may inspire some new projects and investigations involving landforms, maps, and aerial photography.

In Vocabulary, students will find a glossary of words used in the **Landforms Module** investigations and in *FOSS Science Stories: Landforms*. Downloadable pdf files of the vocabulary list and glossary are available here.

Books/Software includes an annotated list of books, videos, and software recommended for the **Landforms Module**.

In Ask a Scientist, students can review questions about landforms that have been submitted by other students and ask appropriate questions of their own. Adult guidance in submitting questions is highly recommended.

NOTE: Instructions for making 3-D viewing glasses and 3-D images for viewing are available at this U.S. Geological Survey website: terraweb.wr.usgs.gov/TRS/kids/glasses.html. Go to this website for images: terraweb.wr.usgs.gov/TRS/kids/CoolStuffToSee.html.

