OVERVIEW
LANDFORMS

GOALS

The **Landforms Module** consists of five investigations that introduce students to these fundamental concepts in earth science: change takes place when things interact; all things change over time; patterns of interaction and change are useful in explaining landforms. Students also learn about some of the tools and techniques used by cartographers and use them to depict landforms.

FOSS EXPECTS STUDENTS TO

- Gain experience with models and maps.
- Gain experience with the concepts of erosion and deposition.
- Observe the effect of water on surface features of the land, using stream tables.
- Plan and conduct stream-table investigations.
- Relate processes that they observe in the stream-table models to processes that created famous landforms.
- Become familiar with topographic maps and some of the techniques used to create them.
- Gain experience with the concepts of contour and elevation.
- Use measurement in the context of scientific investigations.
- Apply mathematics in the context of science.
- Acquire vocabulary associated with landforms and the processes that create landforms.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating.

OVERVIEW CONTENTS

INTERDISCIPLINARY EXTENSIONS	FOSS SCIENCE STORIES	TECHNOLOGY/HOME CONNECTION
Language Extensions • Discuss models. • Describe routes, including fire-escape routes. **Math Extensions** • Problem of the week. • Make proportional drawings. **Science and Social Studies Extensions** • Read other maps. • Create a permanent model. • Find school-site plans. • Plan the perfect school.	See the Science Stories folio. • *Maps and How They Are Made* • *Ancient Maps*	www.fossweb.com Check the FOSS website for interactive simulations, to write questions to a scientist, for teaching tips, and to talk with other classes using FOSS. Home/School Connection: Students draw a map of all or part of their home and mark fire-escape routes.
Language Extensions • Describe the stream-table landforms. • Discuss landform expressions. **Math Extension** • Problem of the week. **Social Studies Extensions** • Where did the Grand Canyon filler go? • Research big rivers. **Science Extensions** • Go on a 15-minute field trip. • Research the local water system.	See the Science Stories folio. • *Real People in the Grand Canyon*	Home/School Connection: Students begin an inventory of landforms they observe in their community and during their other travels.
Language Extensions • Write a stream haiku. • Prepare a report for a scientific conference. **Math Extensions** • Problem of the week. • How much is a million? **Science Extensions** • Take stream-table photos. • Use overlay grid to map the stream table. • Plan a field trip. • Find a local erosion-control expert.	See the Science Stories folio. • *Rivers and Controlling the Flow* • *Shapes of the Earth*	Home/School Connection: Students collect information about landforms in the news.
Language Extension • Write for more maps. **Math Extension** • Problem of the week. **Art and Social Studies Extensions** • Draw people profiles. • Collect topographic maps from other places. **Science Extensions** • Find out what surveyors do. • Construct other profiles.	See the Science Stories folio. • *The Story of Mount Shasta* • *Topographic Maps*	Home/School Connection: Students identify landforms on a local highway map and plan a trip to a landform.
Language Extensions • Design a national-park tour package. • Write about climbing Mt. Shasta. **Math Extension** • Problem of the week. **Science and Social Studies Extensions** • Use an atlas; list maps and their uses. • Study a U.S. landforms orthophoto. • Create aerial photographs. • Draw a local landform map.	See the Science Stories folio. • *Aerial Photography* • *National Parks* • *The Eye of the Needle*	Home/School Connection: Students will need extra time at home to work on presenting their projects to the class.