

SAVVAS

PROGRAM
OVERVIEW



EARTH SCIENCE



Experience Hands-On Earth Science

Renowned authors Edward Tarbuck and Frederick Lutgens invite students on a journey of observation, explanation, and participation in the study of Earth's processes. In *Earth Science*, award-winning technology combines with STEM activities and teacher support to help lead your classroom on a path to discovery.

Do More Science

- Start every chapter with a Try It! Inquiry Activity. Let students explore and discover concepts before reading the chapter.
- Engage students with Quick Labs. These in-class labs allow students to apply earth science concepts and skills with easy setup and minimal materials.
- Explore and develop key concepts with Exploration Labs. These full-scale, hands-on lab experiences encourage students to investigate and interpret earth science principles to develop and analyze conclusions.
- The Laboratory Manual gives students even more opportunities to actively explore and apply concepts. Hands-on experiences in geology, oceanography, meteorology, astronomy, and more provide just the right lab for every learning style.



Increased STEM Focus

- Excite students with real-world engineering design problems and hands-on inquiry that promote higher-order critical thinking skills.
- STEM activities support the implementation of the engineering and design process in an engaging and hands-on way.
- Teachers are provided with point-of-use STEM activities and teaching strategies.

Explorations Through Visuals

- Original instructional artwork by Dennis Tasa leads your diverse classroom on a path to discovery.
- Students build map and visual learning skills with Map It! Activities that deepen their understanding of earth science concepts.
- Visual Summaries help you reach all students with alternative methods of explaining chapter content.

Active Reading Strategies

- Support student success by addressing skills before, during, and after every lesson.
- The Student Edition highlights key concepts to guide reading, additional vocabulary help, and Checkpoint Questions for self-assessment.
- The Reading and Study Guide provides additional practice opportunities and assessment prep.

Spanish Resources

The Spanish Guided Reading and Study Workbook and the Spanish Chapter Tests on Savvas Realize™ support the needs of today's diverse student population.

STEM ACTIVITY

EARTH'S PLACE IN THE UNIVERSE

Science and Engineering Practices Developing and Using Models

Plate Tectonics: Measuring Plate Movement

Without advances in technology, the theory of plate tectonics would still be considered pseudoscience. Past movements of plates have been documented using technologies to collect data. Sonar technology was used to map the topography of the ocean floor, leading to the discovery of mid-ocean ridges. Sonar technology was

that lifted air, the relatively flat central portion of the nation's breadbasket. Fortunately, this is not the case.

In central North America, masses of warm air and cold air collide, producing a **front**. Here the cooler, denser air acts as a barrier over which the warmer, less dense air rises. This process, called **frontal wedging**, is shown in **Figure 8B**. Weather-producing fronts are associated with specific storm systems called middle-latitude cyclones. You will study these in the Weather Patterns and Severe Storms chapter.

VISUAL SUMMARY

PROCESSES THAT LIFT AIR

FIGURE 8 There are four different mechanisms that can cause air to rise—**orographic lifting**, **frontal wedging**, **convergence**, and **localized convective lifting**.

Relate Cause and Effect Why does the warm air mass move upward over the cold air mass?

FIGURE 8
A Orographic Lifting Mountains are a barrier to air flow and force air to ascend.

B Frontal Wedging Warm, less dense air rises above cooler, denser air.

Key Questions

- What is mechanical weathering?
- What is chemical weathering?
- What factors affect the rate of weathering?

Vocabulary

- mechanical weathering
- frost wedging
- exfoliation

Distribución y movimiento del agua subterránea

1. Escoge la letra apropiada de la ilustración que identifica cada una de las características del agua subterránea.

- _____ zona de saturación
- _____ acuífero
- _____ manantial
- _____ nivel freático
- _____ zona de aireación

2. ¿Es cierta o falsa la oración siguiente? El agua subterránea fluye más rápidamente a través del sedimento con espacios grandes y porosos que



Point-of-Use Teacher Resources

Support student comprehension and lesson planning. The Teacher Edition includes all the resources you need to streamline planning:

- Cross Disciplinary Connections
- Teacher Demonstrations
- Differentiated Instruction
- Address Misconceptions
- Assess Prior Knowledge

Savvas Realize™ Learning Management System

Welcome to the award-winning Savvas Realize™ learning management system. It's the digital home of more than 1000 interactive programs from Savvas Learning Company. With one login, you can access everything—from standards-aligned content and customizable assignments to calendars, analytics, and groups.

Now Realize is even better with a newly-refined look, deeper integrations, easier ways to collaborate, and more versatility. Savvas Realize moves learning forward to better serve each student, teacher, and school system. Learn more at savvas.com/realize.

Request a demo or samples.
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