EDC EARTH SCIENCE involves students by challenging them with thought-provoking investigations and questions they hear about in the news or at their family dining table. Students are introduced to this course with an exciting excerpt from the novel *Red Mars*. Their performance assessment in The Mid-Year Challenge—where students prepare a news story (live, video, blog, written) and make predictions about what Earth will be like in the year 2100. In the End-of-Year Challenge students apply the knowledge they have gained during this course to prepare an essay or presentation predicting what Earth will be like when its interior cools completely.

*EDC Earth Science* may be purchased as a full-year discipline-based program in one hard bound book OR as units to create a customized scope and sequence (on the following pages).

**ACCESS TO MY LAB-AIDS ONLINE BOOKSHELF**
- Editable PowerPoints for each lesson
- ExamView
- Printable student sheets
- Online Student and Teacher book with Teacher Resources
- Supplemental Resources

**EDC EARTH SCIENCE FULL-YEAR PROGRAM**

<table>
<thead>
<tr>
<th>Item Description</th>
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<tbody>
<tr>
<td>COMPLETE EQUIPMENT PACKAGE (materials for up to 5 classes of 32 students, mobile storage cart, TE/TR DVD, My Lab-Aids bookshelf access for one teacher for 7 years which includes ExamView, PowerPoints, online Teacher’s Edition and Resources, online Student Book, and supplemental resources)</td>
<td>EDCE-1000</td>
</tr>
<tr>
<td>MY LAB-AIDS BOOKSHELF FOR STUDENTS (access to online book, student sheets, resource supplements; 7 years)</td>
<td>EDCE-10LSP-7</td>
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<tr>
<td>STUDENT BOOK (hardcover)</td>
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<tr>
<td>TEACHER’S EDITION (hardcover)</td>
<td>EDCE-1TE</td>
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**SCIENCE LAB NOTEBOOK** (bulk pricing up to 55% off) SLN-1

Small class sizes for 5 sections of 16 students might consider our **COMPLETE EQUIPMENT PACKAGE FOR 16 STUDENTS PER CLASS** EDCE-IH-1000NC

For custom orders and standards correlations by state please see the “Your State” page on lab-aids.com to contact your state’s Science Curriculum Sales Consultant.
**Pre-Activity Discussion**

Discuss the following topics with your classmates to help you prepare for the Procedure:

1. Based on the information in Figure 11.7, explain why mountains formed by shield volcanoes have a different shape than those formed by stratovolcanoes along subduction zones.
2. Compare and contrast the types of eruptions that occur in 1) shield volcanoes such as those in Hawaii, 2) divergent boundaries, and 3) strata-volcanoes like those in Oregon. (and Mount Rainier in Washington), can be much more violent and rarely affect people.

**Procedure**

Pour 5 mL of less-gassy "magma" (below) into the plastic volcano model (cone and base) to fill the "magma chamber" and can be recognized by their steep surface slopes, as shown in Figure 11.8.

**Materials**

- 60-mL bottle of less-gassy "magma" (red)
- 30-mL graduated cup (clear plastic tube)
- rubber stopper
- vial of baking soda
- white plastic scoop
- 3861 EDPS Earth Science Student Book, Part 2
- metric ruler
- access to a timer or a clock with a second hand
- paper towels and/or sponges

**Safety:** Wash your hands after completing the activity.