





Wasatch Fm Kaiparowits Fm Straight Cliffs Ss Dakota Ss Winsor Fm Entrada Ss

Carmel Fm

Navajo Ss

Figure 16
Geologists have named the many rock layers, or formations, in Canyonlands and in Bryce Canyon, Utah. They also have correlated some formations between the two canyons.

Which of the labeled layers are present at both canyons?

Can layers of rock be correlated in other ways? Sometimes determining relative ages isn't enough, and other dating methods must be used. In Section 3, you'll see how the numerical ages of rocks can be determined, and how geologists have used this information to estimate the age of Earth.

Section



Assessment

- 1. Suppose you haven't cleaned out your locker all year. Where would you expect to find papers from the beginning of the year? What principle of geology would you use to find these old papers?
- 2. Explain the concept of relative age.
- 3. What is a disconformity?
- **4.** What is one way to correlate similar rock layers in two different areas?
- **5. Think Critically** Explain the relationship between the concept of relative age and the principle of superposition.

Skill Builder Activities

- 6. Interpreting Data A sandstone contains a 400-million-year-old fossil. A shale contains fossils that are over 500 million years old. A limestone, underlying a sandstone, contains fossils that are between 400 million and 500 million years old. Which rock bed is oldest? Explain. For more help, refer to the Science Skill Handbook.
- 7. Using an Electronic Spreadsheet Use this section to prepare a table comparing and contrasting types of unconformities. For more help, refer to the Technology Skill Handbook.