

## Earth and Life History

Name:

## Rock Layer Puzzles

Period:

Use Chapter 8, Section 2 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them. Some terms may be used more than once.

actual    affected    older    order    younger

### Rock-Layer Puzzles (p.243)

1. The principle of superposition states that \_\_\_\_\_ rock layers will be found on top of \_\_\_\_\_ rock layers if the layers have not been turned over.
2. Rock layers can be \_\_\_\_\_ by more than one event, so geologists have to figure out the \_\_\_\_\_ of events that made the rock layers.

### The Law of Crosscutting Relationships (p.243)

3. A fault or intrusion is \_\_\_\_\_ in relation to the body of rock it cuts through.
- \_\_\_\_\_ 4. Which of the following is NOT true of rock-layer sequences?
  - a. Rock-layer sequences often are affected by more than one event.
  - b. Rock-layer sequences often are affected by a single event.
  - c. Intrusions may squeeze into rock layers that contain an unconformity.
  - d. Rock-layer sequences help geologists understand the history of Earth.

### Relative Ages of Rock Layers and Features (p.243)

- \_\_\_\_\_ 5. Which of the following statements is true about Figure 6 in your textbook?
  - a. The fault formed before the igneous intrusion.
  - b. The igneous intrusion formed first.
  - c. The igneous intrusion formed last
  - d. The fault formed last.
6. In the space below, number events from *oldest* (1) to *most recent* (5).

- \_\_\_\_\_ fault disturbed layers
- \_\_\_\_\_ erosion removed top material, including the top of the intrusion
- \_\_\_\_\_ two sedimentary layers formed after erosion
- \_\_\_\_\_ igneous intrusion occurred
- \_\_\_\_\_ three sedimentary layers deposited



### Order of Events (p.244)

- \_\_\_\_\_ 7. What does relative dating tell geologists?
  - a. the order of events
  - b. when events took place
  - c. both the order and when events took place
  - d. what events will happen in the future
8. Relative dating is combined with information to figure out \_\_\_\_\_ dates.