

Chapter 12 Geologic Time

# Section 12.1 Discovering Earth's History

*This section explains how geologists use rocks to interpret Earth's history.*

## Reading Strategy

**Identifying Main Ideas** As you read, fill in the first column of the table with a main idea and add details that support it in the second column. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Main Idea	Details
1.	
2.	
3.	
4.	
5.	

## Rocks Record Earth History

1. 🗣️ What information about Earth's history do rocks record?

\_\_\_\_\_

\_\_\_\_\_

2. 🗣️ Is the following sentence true or false? By examining the rock record, we have learned that Earth is much younger than it was previously thought to be. \_\_\_\_\_

## A Brief History of Geology

3. 🗣️ The concept that the processes at work on Earth today were also at work long ago is known as the principle of \_\_\_\_\_.

## Relative Dating—Key Principles

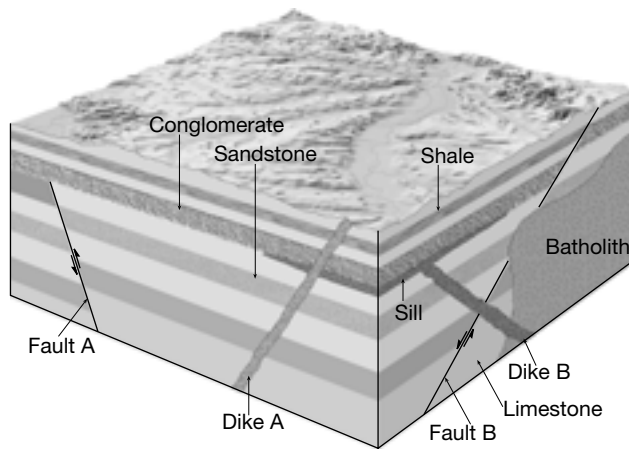
4. 🗣️ Is the following sentence true or false? Scientists use relative dating to tell how long ago events occurred on Earth. \_\_\_\_\_
5. 🗣️ What is the principle of original horizontality? \_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

### Chapter 12 Geologic Time

6. Use the following figure to complete each sentence comparing the relative ages of the features. Where indicated, identify the law or principle you used to arrive at your answer.
- Dike B is \_\_\_\_\_ than fault B.  
Law or principle: \_\_\_\_\_
  - The shale is \_\_\_\_\_ than the sandstone.  
Law or principle: \_\_\_\_\_
  - Dike B is \_\_\_\_\_ than the batholith.  
Law or principle: \_\_\_\_\_
  - The sandstone is \_\_\_\_\_ than Dike A.
  - The conglomerate is \_\_\_\_\_ than the shale.



Match each description with its term.

Description	Term
_____ 7.  represents a long period when deposition stopped, erosion occurred, and deposition resumed	a. angular unconformity
_____ 8. two sedimentary rock layers separated by an erosional surface	b. disconformity
_____ 9.  represents a period when deformation and erosion occurred	c. unconformity

### Correlation of Rock Layers

10. Circle the letter of the task of matching up rocks of similar age in different regions.
- correlation
  - superposition
  - uniformitarianism
  - unconformity