Chapter 8 Earthquakes and Earth's Interior

Section 8.1 What Is an Earthquake?

This section explains what earthquakes and faults are and what causes earthquakes.

Reading Strategy

Building Vocabulary As you read this section, write a definition for each vocabulary term in your own words. 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.

Vocabulary	Definition
earthquake	a.
b.	C.
d.	е.
f.	g.

- **1.** Circle the letter of the approximate number of major earthquakes that take place each year.
 - a. about 50

- b. about 75
- c. about 3000
- d. about 30,000

Earthquakes

Match each description with its earthquake feature.

Description 2. Earth vibration caused by rapid energy release 3. energy that radiates in all directions from the earthquake origin 4. fracture where movement has occurred 5. surface location directly above where an earthquake originates

6. location within Earth where an

earthquake originates

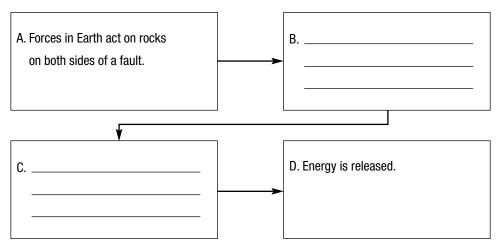
Earthquake Feature

- a. epicenter
- b. focus
- c. seismic wave
- d. fault
- e. earthquake

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Cause of Earthquakes

- 7. Is the following sentence true or false? It was not until after the 1906 San Francisco earthquake was studied that the actual cause of earthquakes was understood. _____
- 8. Complete the flowchart to show the sequence of events that occur when rocks are deformed along a fault.



- 9. The _____ hypothesis states that when rocks are deformed, they bend and then break, releasing stored energy.
- 10. What causes most earthquakes? _____
- 11. Is the following sentence true or false? Most earthquakes occur along existing faults. _____
- 12. Circle the letter of small Earth movements that occur following a major earthquake.
 - a. foreshocks
 - b. slippage
 - c. aftershocks
 - d. foci
- 13. The ______ has been studied more than any other fault system in the world.
- **14.** What is fault creep? _____