# **Standardized Test Practice**

# **Multiple Choice**

- 1. Why is only 61 percent of the northern hemisphere covered with water?
  - **A.** Most landmasses are in the northern hemisphere.
  - **B.** Most landmasses are in the southern hemisphere.
  - C. The northern hemisphere is colder thus allowing less water to flow there.
  - **D.** Gravity causes more water to settle in the southern hemisphere.

*Use the table below to answer Questions 2 and 3.* 

Some Earthquakes in Recent History									
Location	Year	Richter Magnitude							
Chile	1960	8.5							
California	1906	7.9							
Alaska	1964	8.6							
Colombia	1994	6.8							
Taiwan	1999	7.6							

- 2. Approximately how much more energy was released by the earthquake in Chile than the earthquake in Taiwan?

  - A. 2 times as much C. 32 times as much

  - **B.** 10 times as much **D.** 1000 times as much
- 3. Approximately how much larger was the amplitude of the waves generated by the earthquake in Alaska than the earthquake in Taiwan?
  - **A.** 2 times as large
- C. 100 times as large
- **B.** 10 times as large **D.** 1000 times as large
- **4.** Who were the first people to propose the idea that Earth's landmasses at one time were all connected?
  - **A.** explorers
- C. scientists
- **B.** mathematicians
- **D.** mapmakers
- 5. Which does NOT have any effect on Earth's tides?
  - A. Earth
- C. the Sun
- **B.** the Moon
- **D.** the atmosphere
- **6.** What is formed as turbidity currents drop sediment?
  - A. continental rise
- C. abyssal plains
- **B.** continental slope **D.** deep-sea trenches

Use the maps below to answer Questions 7 and 8.





**Ocean currents** 

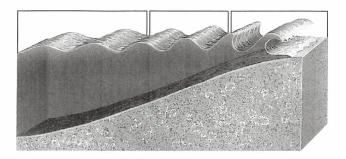
Wind currents

- 7. What can be concluded by comparing the maps?
  - A. Surface wind currents flow mostly to the east, and surface ocean currents flow mostly to the west.
  - **B.** Surface wind currents flow mostly to the west, and surface ocean currents flow mostly to the east.
  - C. The direction of surface ocean currents is opposite the direction of surface wind currents.
  - **D.** The direction of surface ocean currents is related to the direction of surface wind currents.
- **8.** The Coriolis effect is the rightward curvature of winds in the northern hemisphere and the leftward curvature of winds in the southern hemisphere. What causes the Coriolis effect?
  - **A.** the intersection of warm and cool ocean currents
  - B. the revolution of Earth around the Sun
  - **C.** the rotation of Earth on its axis
  - **D.** the seasonal changes in global temperature
- 9. Most sedimentary rocks are formed by
  - **A.** uplifting and melting
  - **B.** compaction and cementation
  - C. eruption of volcanoes
  - D. changes deep within Earth
- 10. Which type of volcano is potentially the most dangerous to humans and the environment?
  - **A.** shield volcano
- C. cinder cone volcano
- **B.** composite volcano **D.** compact volcano



### **Short Answer**

*Use the illustration below to answer Questions 11 and 12.* 



- 11. Describe the changes that occur as waves move closer to shore.
- 12. Contrast water movement and energy movement in an ocean wave.
- 13. What does the location of mountains on the seafloor that are not near any active volcanism suggest?
- **14.** How does convection in the mantle cause plate motions?
- 15. Describe tephra and its two possible sources.
- **16.** How are the continental shelves, covered with water after the last ice age, now benefiting humans?

# Reading for Comprehension

#### **Earthquake Detection**

The belief that animals can detect incoming earthquakes has been around for centuries. In 373 B.C., historians recorded that animals, including rats, snakes, and weasels, deserted the Greek city of Helice just days before an earthquake devastated the place. Similar accounts have surfaced across the centuries since.

Catfish moving violently, chickens that stop laying eggs, and bees leaving their hive in a panic have been reported. But precisely what animals sense is a mystery. One theory is that wild and domestic creatures can feel Earth vibrate before humans can. Other ideas suggest that they detect electric changes in the air or gas released from Earth. Earthquakes are a sudden phenomenon. Seismologists have no way of knowing exactly when or where the next one will hit. An estimated 500,000 detectable earthquakes occur in the world each year. Of those, 100,000 can be felt by humans, and 100 cause damage. Researchers have long studied animals in hopes of discovering what they hear or feel before an earthquake in order to use that sense as a prediction tool. American seismologists are skeptical. Even though there have been documented cases of strange animal behavior prior to earthquakes, according to the USGS, a reproducible connection between a specific behavior and the occurrence of an earthquake has never been made.

Article obtained from: Mott, M. Can animals sense earthquakes? National Geographic News, November 11, 2003.

- 17. What can be inferred from this passage?
  - **A.** Animals can predict earthquakes because they can feel the vibrations before humans.
  - **B.** Animals cannot predict earthquakes.
  - C. Further study and research is needed before it can be confirmed or denied that animals can predict earthquakes.
  - **D.** Animals have been predicting earthquakes for centuries.
- 18. Which was NOT an animal behavior cited as proof that animals can predict earthquakes?
  - A. catfish moving violently
  - B. chickens laying eggs
  - C. bees leaving their hives
  - **D.** snakes deserting a city

NEED EXTRA HELP?																
If You Missed Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Review Section	15.1	19.3	19.3	17.1	15.2	16.2	15.3	12.2	6.1	18.3	15.3	15.3	16.2	17.4	18.2	16.2

