Earth Science Chapter 7 Section 3 Review

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Desert pavement is created as a result of ____.
   a. abrasion c. blowouts
   b. deflation d. water erosion

____ 2. Abrasion changes the desert surface by ____.
   a. creating blowouts
   b. depositing loess across the landscape
   c. cutting and polishing exposed rock surfaces
   d. creating pinnacles and narrow pedestals in the rock

____ 3. The action of abrasion can best be described as ____.
   a. windblown sand cutting and polishing exposed rock surfaces
   b. coarse sand particles rolling along the desert surface
   c. sand being blown high into the air to cut and carve rock formations
   d. the wind creating desert pavement

____ 4. What is a blowout?
   a. a stony surface layer caused by deflation
   b. a stony surface layer caused by abrasion
   c. a shallow depression caused by abrasion
   d. a shallow depression caused by deflation

____ 5. Windblown silt that blankets a landscape is called ____.
   a. a blowout c. desert pavement
   b. a sand dune d. loess

____ 6. Which of the following is NOT deposited by wind?
   a. till c. loess
   b. barchan sand dunes d. longitudinal dunes

____ 7. Sand dunes that form scalloped rows of sand at right angles to the wind are called ____.
   a. star dunes c. transverse dunes
   b. parabolic dunes d. barchanoid dunes

____ 8. Dunes whose tips point into the wind are called ____.
   a. barchan dunes c. transverse dunes
   b. longitudinal dunes d. parabolic dunes

____ 9. Long sand ridges that are oriented more or less parallel to the prevailing wind are called ____.
   a. transverse dunes c. longitudinal dunes
   b. barchan dunes d. parabolic dunes
10. In Figure 7-2, which diagram illustrates barchan dunes?
   a. diagram A  
   b. diagram B  
   c. diagram C  
   d. diagram D

11. In Figure 7-2, which diagram illustrates longitudinal dunes?
   a. diagram A  
   b. diagram B  
   c. diagram C  
   d. diagram D

Completion

Complete each statement.

12. The lifting and removal of loose material by wind is called ____________________.

13. Desert rock surfaces are cut and polished by windblown sand in a process known as ____________________.

14. Deposits of windblown silt are called ____________________.
15. Long sand ridges oriented at right angles to the wind form _______________ dunes.

Short Answer: ON THE TEST, you will have to complete TWO SHORT ANSWER QUESTIONS from ALL of the short answer questions that appear in the chapter.

16. Describe the two ways that wind causes erosion.

17. What are the sloping layers called that are formed when sand is deposited in dunes?

Figure 7-2

18. Identify the four types of sand dunes illustrated in Figure 7-2.
Essay: ON THE TEST, you will have to complete ONE ESSAY QUESTION from ALL of the essay questions that appear in the chapter.

19. Explain how sand dunes form by describing the movement and direction of the wind and how sand is deposited.
Earth Science Chapter 7 Section 3 Review
Answer Section

MULTIPLE CHOICE

1. ANS: B PTS: 1 DIF: L1 OBJ: 7.7
2. ANS: C PTS: 1 DIF: L1 OBJ: 7.7
3. ANS: A PTS: 1 DIF: L1 OBJ: 7.7
4. ANS: D PTS: 1 DIF: L1 OBJ: 7.7
5. ANS: D PTS: 1 DIF: L1 OBJ: 7.8
6. ANS: A PTS: 1 DIF: L1 OBJ: 7.8
7. ANS: D PTS: 1 DIF: L1 OBJ: 7.9
8. ANS: D PTS: 1 DIF: L1 OBJ: 7.9
9. ANS: C PTS: 1 DIF: L1 OBJ: 7.9
10. ANS: A PTS: 1 DIF: L1 OBJ: 7.9
11. ANS: D PTS: 1 DIF: L1 OBJ: 7.9

COMPLETION

12. ANS: deflation
   PTS: 1 DIF: L1 OBJ: 7.7
13. ANS: abrasion
   PTS: 1 DIF: L1 OBJ: 7.7
14. ANS: loess
   PTS: 1 DIF: L1 OBJ: 7.8
15. ANS: transverse
   PTS: 1 DIF: L1 OBJ: 7.9

SHORT ANSWER

16. ANS:
    Deflation is the lifting and removal of loose particles, and abrasion occurs when windblown sand cuts and polishes exposed rock surfaces.
   PTS: 1 DIF: L1 OBJ: 7.7
17. ANS:
    cross beds
   PTS: 1 DIF: L1 OBJ: 7.8
18. ANS:
A. barchan dunes, B. transverse dunes, C. barchanoid dunes, and D. longitudinal dunes

PTS: 1  DIF: L1  OBJ: 7.9

ESSAY

19. ANS:
The wind’s velocity falls when it encounters an obstruction, such as vegetation or a rock, and the sand particles it carries drop to the ground. A dune begins near an obstruction but, once the mound builds, it serves as its own obstruction, trapping more and more sand. The wind blows up and over the crest of the dune on the gently sloping windward side. The wind speed slows abruptly at the crest and the sand drops down on the sheltered, steeper side of the dune.

PTS: 1  DIF: L2  OBJ: 7.9