

Chapter 12 Weathering and Erosion

Multiple Choice

Select the definition that most nearly defines the given word.

1. _____ **Landform**
 - A. chemical combination of metallic elements with oxygen
 - B. layer of weathered rock fragments covering much of the earth's surface
 - C. slow downhill movement of weathered rock material
 - D. physical feature of the earth's surface

2. _____ **Mesa**
 - A. This term is used to describe a huge desert rock that has a broad, flat top and resembles a table.
 - B. process that changes the physical form of rocks
 - C. chemical reaction between water and another substance
 - D. change in the physical form or chemical composition of rock materials exposed at the earth's surface

3. _____ **Talus**
 - A. plateau
 - B. pile of rock fragments that accumulates at the base of a slope
 - C. An abraded area where the skin is torn or worn off.
 - D. sudden movement of loose rock and soil down a slope

4. _____ **Exfoliation**
 - A. process in which sheets of rock peel or flake as a result of weathering
 - B. dark, organic material formed from the decayed remains of plants and animals
 - C. downhill movement of a large block of soil under the influence of gravity
 - D. process in which parallel layers of topsoil are stripped away, exposing the surface of the underlying subsoil or partially weathered bedrock

5. _____ **Mechanical weathering**
 - A. process that changes the physical form of rocks
 - B. knob of rock that protrudes above a peneplain
 - C. process by which the products of weathering are transported
 - D. slow downslope flow of wet, muddy topsoil over frozen or clay-rich subsoil

6. _____ **Humus**
 - A. elevated, narrow, flat-topped area
 - B. physical feature of the earth's surface
 - C. pile of rock fragments that accumulates at the base of a slope
 - D. dark, organic material formed from the decayed remains of plants and animals

7. _____ **Regolith**
 - A. layer of weathered rock fragments covering much of the earth's surface
 - B. low, almost level surface of a mountain in its old stage
 - C. process in which sheets of rock peel or flake as a result of weathering
 - D. cross section of soil layers and bedrock

8. _____ **Landslide**
 - A. sudden movement of loose rock and soil down a slope
 - B. process in which rock is broken down as a result of chemical reactions
 - C. mechanical weathering caused by the freezing and thawing of water that seeps into cracks in rocks

Name _____



Date _____

D. process in which water carries dissolved minerals to lower layers of rock

9. _____

Mudflow

- A. fall of rock from a steep cliff
- B. A specific layer or stratum of soil or subsoil in a vertical cross section of land.
- C. rapidly moving large mass of mud
- D. thick infertile soils produced in tropical climates

10. _____

Butte

- A. chemical weathering process in which minerals react with carbonic acid
- B. movement of rock fragments down a slope
- C. elevated, narrow, flat-topped area
- D. rapidly moving large mass of mud

11. _____

Peneplain

- A. layer of weathered rock fragments covering much of the earth's surface
- B. low, almost level surface of a mountain in its old stage
- C. An abraded area where the skin is torn or worn off.
- D. thick infertile soils produced in tropical climates

12. _____

Creep

- A. slow downslope flow of wet, muddy topsoil over frozen or clay-rich subsoil
- B. process that changes the physical form of rocks
- C. plateau
- D. slow downhill movement of weathered rock material

13. _____

Horizon

- A. low, almost level surface of a mountain in its old stage
- B. A specific layer or stratum of soil or subsoil in a vertical cross section of land.
- C. downhill movement of a large block of soil under the influence of gravity
- D. process in which sheets of rock peel or flake as a result of weathering

14. _____

Leaching

- A. process in which parallel layers of topsoil are stripped away, exposing the surface of the underlying subsoil or partially weathered bedrock
- B. The part of soil made up of decayed leaves and organic matter that helps plants grow.
- C. process in which water carries dissolved minerals to lower layers of rock
- D. chemical weathering process in which minerals react with carbonic acid

15. _____

Abrasion

- A. change in the physical form or chemical composition of rock materials exposed at the earth's surface
- B. elevated, narrow, flat-topped area
- C. process in which rock is broken down as a result of chemical reactions
- D. An abraded area where the skin is torn or worn off.

16. _____

Mass movement

- A. A specific layer or stratum of soil or subsoil in a vertical cross section of land.
- B. pile of rock fragments that accumulates at the base of a slope
- C. sudden movement of loose rock and soil down a slope
- D. movement of rock fragments down a slope

17. _____

Oxidation

- A. physical feature of the earth's surface
- B. chemical combination of metallic elements with oxygen
- C. movement of rock fragments down a slope
- D. knob of rock that protrudes above a peneplain



Name _____

Date _____

18. _____ **Erosion**
A. A type of physical weathering in which rocks are gradually worn down.
B. cross section of soil layers and bedrock
C. chemical combination of metallic elements with oxygen
D. process in which water carries dissolved minerals to lower layers of rock
19. _____ **Chemical weathering**
A. process by which the products of weathering are transported
B. slow downhill movement of weathered rock material
C. mechanical weathering caused by the freezing and thawing of water that seeps into cracks in rocks
D. process in which rock is broken down as a result of chemical reactions
20. _____ **Ice wedging**
A. mechanical weathering caused by the freezing and thawing of water that seeps into cracks in rocks
B. fall of rock from a steep cliff
C. chemical reaction between water and another substance
D. rapidly moving large mass of mud
21. _____ **Rockfall**
A. process in which sheets of rock peel or flake as a result of weathering
B. fall of rock from a steep cliff
C. process in which parallel layers of topsoil are stripped away, exposing the surface of the underlying subsoil or partially weathered bedrock
D. plateau
22. _____ **Soil profile**
A. pile of rock fragments that accumulates at the base of a slope
B. cross section of soil layers and bedrock
C. rapidly moving large mass of mud
D. elevated, narrow, flat-topped area
23. _____ **Monadnock**
A. physical feature of the earth's surface
B. mechanical weathering caused by the freezing and thawing of water that seeps into cracks in rocks
C. knob of rock that protrudes above a peneplain
D. chemical combination of metallic elements with oxygen
24. _____ **Slump**
A. downhill movement of a large block of soil under the influence of gravity
B. process by which the products of weathering are transported
C. A specific layer or stratum of soil or subsoil in a vertical cross section of land.
D. sudden movement of loose rock and soil down a slope
25. _____ **Carbonation**
A. The wearing down of rock particles by friction due to water or wind or ice.
B. chemical weathering process in which minerals react with carbonic acid
C. slow downslope flow of wet, muddy topsoil over frozen or clay-rich subsoil
D. low, almost level surface of a mountain in its old stage
26. _____ **Sheet erosion**
A. process in which parallel layers of topsoil are stripped away, exposing the surface of the underlying subsoil or partially weathered bedrock
B. layer of weathered rock fragments covering much of the earth's surface
C. downhill movement of a large block of soil under the influence of gravity
D. fall of rock from a steep cliff



Name _____

Date _____

27. _____

Laterite

- A. change in the physical form or chemical composition of rock materials exposed at the earth's surface
- B. process in which rock is broken down as a result of chemical reactions
- C. slow downhill movement of weathered rock material
- D. thick infertile soils produced in tropical climates

28. _____

Weathering

- A. chemical reaction between water and another substance
- B. process in which water carries dissolved minerals to lower layers of rock
- C. movement of rock fragments down a slope
- D. change in the physical form or chemical composition of rock materials exposed at the earth's surface

29. _____

Solifluction

- A. slow downslope flow of wet, muddy topsoil over frozen or clay-rich subsoil
- B. thick infertile soils produced in tropical climates
- C. process that changes the physical form of rocks
- D. The part of soil made up of decayed leaves and organic matter that helps plants grow.

30. _____

Hydrolysis

- A. movement of rock fragments down a slope
- B. chemical reaction between water and another substance
- C. chemical weathering process in which minerals react with carbonic acid
- D. slow downslope flow of wet, muddy topsoil over frozen or clay-rich subsoil

Answer Key

1. D
2. A
3. B
4. A
5. A
6. D
7. A
8. A
9. C
10. C

11. B
12. D
13. B
14. C
15. D
16. D
17. B
18. A
19. D
20. A

21. B
22. B
23. C
24. A
25. B
26. A
27. D
28. D
29. A
30. B