

How do Rocks Break Down into Smaller Particles p 204

1. Explain the difference between weathering and erosion.
2. Explain the difference between erosion and transportation.

How Weathering Alters Rocks p 204

3. Explain and give an example of mechanical weathering.
4. What is another name for mechanical weathering?
5. Explain chemical weathering.
6. Using granite as an example, explain the different effects of mechanical and chemical weathering.
7. What is the rate of weathering (slow or fast)?
8. What mineral causes limestone and marble to chemically weather?

Effects of Weathering p 204

9. Why do field geologists carry rock hammers?
10. What are some benefits of weathering?
11. Describe spheroidal weathering.
12. Describe differential weathering.

Mechanical Weathering pp 204-206

13. Describe the two types of frost action; frost wedging and frost heaving.
14. Explain pressure release as it relates to sheet joints and exfoliation.

15. Draw a simple diagram Fig 8.8 p 208 of sheet joints and exfoliation.

16. Name the two types of biological (plants and animals) weathering.

How Do Rocks Decompose pp 207 - 209

17. Describe an example of the reaction of oxygen in the atmosphere causing weathering.

18. What color is soil that is commonly the result weathering of iron-containing minerals?

How Do Acids Affect Rocks? pp 209 - 211

19. What two substances form carbonic acid?

20. Why is carbonic acid the most effective agent of chemical weathering?

21. Describe (diagram fig 8.16) how rain and soil plays a role in chemical weathering?

How Do Clay Minerals Form? p 212

22. What is feldspar attacked by to become a clay mineral?

Chemical Weathering of Other Minerals p 212

23. What type of mineral is quite resistant to chemical weathering?

24. Where is this mineral found in Bowen's Reaction Series? (not in text)

25. What types of minerals are vulnerable to chemical weathering?

26. Where are these minerals found in Bowen's Reaction Series? (not in text)

27. Describe how diamonds can be concentrated by weathering.

Weathering and Climate p 214

28. What type of climate causes the most intense chemical weathering?

29. What type of climate slows down chemical weathering?