

Unit 4 Section 4 Study Guide

Directions: Answer the following questions.

Reviewing Objectives Part 1:

1. Explain how the size and shape of grains in a sedimentary rock indicate the environment of formation (including climate) and deposition. Pages 135-140
2. Explain how the crystal sizes of igneous rocks indicate the rate of cooling and whether the rock is extrusive or intrusive. Pages 129-134
3. Explain how the texture (foliated, nonfoliated) of metamorphic rock can indicate whether it has experienced regional or contact metamorphism. Pages 141-144

Reviewing Major Concepts Part 2: Chapter 6 section 2,3,4

1. Describe how chemical and organic sedimentary rocks form, and give two examples of each.
2. Describe how clastic sedimentary rock differs from chemical and organic sedimentary rock.
3. Explain how the physical characteristics of sediments change during transport.
4. Identify seven features that you can use to identify the depositional environment in which sedimentary rocks formed.
5. Contrast partial melting and fractional crystallization.
6. Describe how the cooling rate of magma affects the texture of igneous rock.
7. Distinguish between foliated and nonfoliated metamorphic rocks.
8. Identify two foliated metamorphic rocks and two nonfoliated metamorphic rocks.

CRITICAL THINKING

9. Making Comparisons Compare the histories of rounded, smooth rocks and angular, uneven rocks.
10. Identifying Relationships Which of the following would most effectively sort sediments: a fast-moving river or a small, slow-moving stream? Explain your answer.