

## Unit 4 Section 3 Study Guide

**Directions: Answer the following questions.**

### **Reviewing Objectives Part 1:**

1. Discriminate between igneous, metamorphic, and sedimentary rocks and describe the processes that change one kind of rock into another. Page 125-144
2. Explain the relationship between the rock cycle and plate tectonics theory in regard to the origins of igneous, sedimentary, and metamorphic rocks. Page 125-144

### **Reviewing Major Concepts Part 2: Chapter 6 section 1,3,4**

1. Describe the process of metamorphism.
2. Explain the difference between regional and contact metamorphism.
3. Distinguish between foliated and nonfoliated metamorphic rocks.
4. Identify two foliated metamorphic rocks and two nonfoliated metamorphic rocks.
5. Identifying Relationships The Himalaya Mountains are located on a boundary between two colliding tectonic plates. Would most of the metamorphic rock in that area occur in small patches or in wide regions? Explain your answer.
6. Explain how the processes of compaction and cementation form sedimentary rock.
7. Describe how chemical and organic sedimentary rocks form, and give two examples of each.
8. Describe how clastic sedimentary rock differs from chemical and organic sedimentary rock.
9. Explain how the physical characteristics of sediments change during transport.
10. Identify seven features that you can use to identify the depositional environment in which sedimentary rocks formed.
11. Use the following terms to create a concept map: cementation, clastic sedimentary rock, sedimentary rock, chemical sedimentary rock, compaction, and organic sedimentary rock.
12. Identify the three major types of rock.
13. Explain how each major type of rock forms.
14. Describe the steps in the rock cycle.