

Chapter 3 Rocks

# Section 3.2 Igneous Rocks

(pages 70–74)

*This section discusses the characteristics of igneous rocks.*

## Reading Strategy (page 70)

**Outlining** Complete the outline as you read. Include points about how each of these rocks form, some of the characteristics of each rock type, and some examples of each. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

I. Igneous Rocks

A. Intrusive Rocks

1. rock that forms when magma hardens beneath Earth’s surface
2. Common example of igneous intrusive rock is granite.

B. Extrusive Rocks

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

## Formation of Igneous Rocks (page 71)

*Match each description to its term.*

Description	Term
_____ 1. the meaning of the Latin word <i>ignis</i>	a. magma
_____ 2. rocks that form when magma hardens beneath Earth’s surface	b. granite
_____ 3. rocks that form when lava hardens	c. intrusive igneous
_____ 4. melted material beneath Earth’s surface	d. lava
_____ 5. melted material at Earth’s surface	e. fire
_____ 6. an intrusive igneous rock that forms when magma cools slowly beneath Earth’s surface	f. extrusive igneous

**Chapter 3 Rocks**

8. Both granite and rhyolite are types of igneous rock. Use the phrases in the box to complete the table.

large interlocking crystals      intrusive igneous rock  
 small mineral grains            extrusive igneous rock

<b>Granite</b>	<b>Rhyolite</b>
forms from slow cooling magma	forms from rapid cooling lava

**Classification of Igneous Rocks (pages 72–74)**

9. Two characteristics used to classify igneous rocks are texture and \_\_\_\_\_.
10. Is the following sentence true or false? Igneous rocks that are composed primarily of quartz and feldspar have a granitic composition.  
 \_\_\_\_\_
11. Use one of the following terms below to fill in the blank.

basaltic composition  
 andesitic composition  
 granitic composition

- Rocks that contain dark silicate minerals and plagioclase feldspar have a(n) \_\_\_\_\_.
12. Circle the letters of the minerals that are found in andesitic rocks.  
 a. amphibole            b. pyroxene            c. biotite
13. Peridotite is composed almost entirely of dark silicate minerals. Its chemical composition is referred to as \_\_\_\_\_.
14. Is the following sentence true or false? Much of the upper mantle is thought to be made of granite. \_\_\_\_\_