

## Chapter 4

Text Pages 90-96

## STUDY GUIDE

## ● Igneous Rocks

Use the words in the box to fill in the blanks

200	iron	slow	lava
fine	1400	lighter	dense
magma	large	silicon	abundant
formation	surface	igneous	granitic
basaltic	radioactive	crystals	pressure
intrusive	extrusive	minerals	magnification

Most \_\_\_\_\_ originates 60 to \_\_\_\_\_ below Earth's surface. Temperatures reach about \_\_\_\_\_ °C at these depths. In certain locations, \_\_\_\_\_ and heat caused by overlying rocks and \_\_\_\_\_ elements produce magma. Rocks formed from molten Earth materials are \_\_\_\_\_ rocks. When magma cools below Earth's surface, it forms \_\_\_\_\_ -grained, \_\_\_\_\_ igneous rocks. The \_\_\_\_\_ of these common rocks grow large because of the \_\_\_\_\_ rate of cooling. When magma moves to Earth's \_\_\_\_\_, it is called \_\_\_\_\_. When lava cools on Earth's surface, it forms \_\_\_\_\_ -grained, \_\_\_\_\_ igneous rocks. Minerals of extrusive rocks are so small that \_\_\_\_\_ is needed for identification. Igneous rocks can be classified by their \_\_\_\_\_. They can also be classified by the types of \_\_\_\_\_ in them. \_\_\_\_\_ igneous rocks are dark-colored, heavy, and \_\_\_\_\_. They contain \_\_\_\_\_ and magnesium. \_\_\_\_\_ igneous rocks are \_\_\_\_\_ -colored and less dense. They contain a lot of oxygen and \_\_\_\_\_. Igneous rocks are the most \_\_\_\_\_ on Earth.

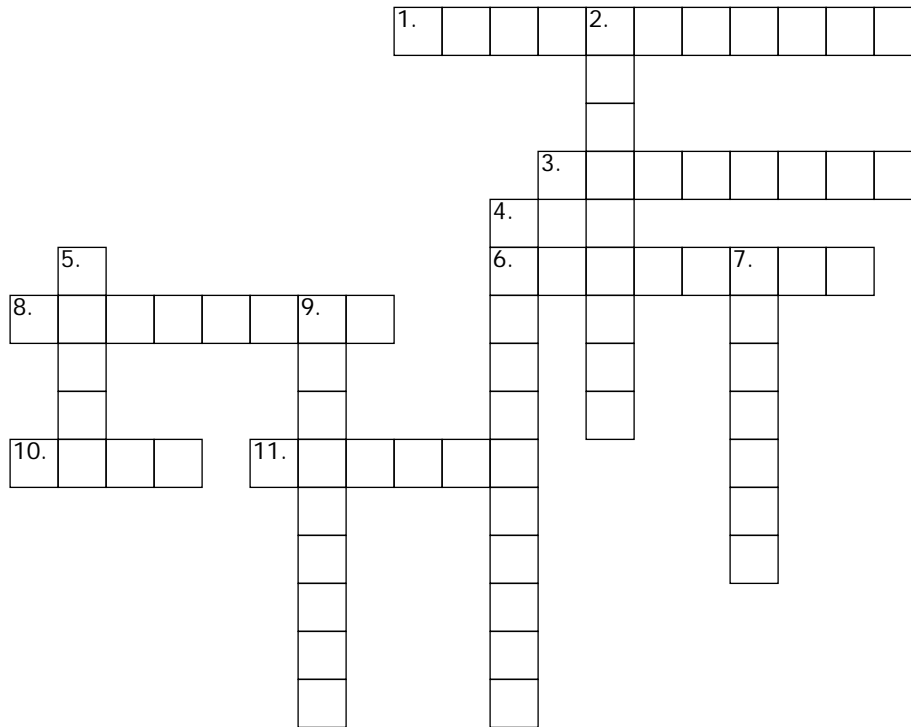
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## REINFORCEMENT

## ● Igneous Rocks

Complete the crossword puzzle using the clues below.

**Across**

1. One of two conditions needed to melt minerals into magma
3. Light-colored igneous rocks
6. An extrusive igneous rock that is actually glass
8. Dark-colored igneous rocks rich in iron and magnesium
10. Molten material that flows from volcanoes
11. Another name for the mineral crystals in cooling magma or lava

**Down**

2. Igneous rock formed when lava cools at or near Earth's surface
4. One of two items used to classify igneous rocks
5. Molten material below Earth's surface
7. Large group of rocks which form from magma or lava
9. Rock formed when magma cools slowly beneath Earth's surface