

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

# Minerals & Rocks

The Physical Setting: Earth Science

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## Worksheet: Igneous Rocks

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- Which is a fine-grained igneous rock made up primarily of pyroxene and plagioclase feldspar?
  - granite
  - gabbro
  - basalt
  - rhyolite
- The best evidence for determining the cooling rate of an igneous rock during its solidification is provided by
  - the disintegration of radioactive substances
  - the crystal size of its minerals
  - index fossils
  - faults in the rock
- Basalt contains the greatest quantity of which mineral?
  - mica
  - quartz
  - pyroxene
  - potassium feldspar
- Which statement best describes the percentage of plagioclase feldspars in a sample of gabbro?
  - Gabbro always contains less plagioclase than pyroxene
  - Gabbro contains no plagioclase feldspars
  - Plagioclase feldspars always make up 25% of a gabbro sample
  - The percentage of plagioclase feldspar in gabbro can vary
- Which property would be most useful for identifying igneous rocks?
  - types of fossils present
  - kind of cement
  - number of minerals present
  - mineral composition
- A fine-grained igneous rock contains 11% plagioclase, 72% pyroxene, 15% olivine, and 2% amphibole. This rock would most likely be classified as
  - rhyolite
  - gabbro
  - basalt
  - granite
- Which is the best description of the properties of basalt?
  - fine-grained and felsic
  - coarse-grained and mafic
  - coarse-grained and felsic
  - fine-grained and mafic

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8. Rhyolite and granite are alike in that they both are
  - a. felsic
  - b. fine-grained
  - c. dark-colored
  - d. mafic
  
9. Most igneous rocks form by which processes?
  - a. erosion and deposition
  - b. heat and pressure
  - c. melting and solidification
  - d. compaction and cementation
  
10. Rhyolite is an example of a
  - a. polymineralic sedimentary rock
  - b. polymineralic igneous rock
  - c. monomineralic sedimentary rock
  - d. monomineralic igneous rock
  
11. Which texture best describes an igneous rock that formed deep underground?
  - a. glassy
  - b. fine grained
  - c. vesicular
  - d. coarse grained
  
12. A nonvesicular rock is made entirely of green 2-millimeter-diameter crystals is most likely
  - a. granite
  - b. dunite
  - c. obsidian
  - d. pumice
  
13. Which igneous rock has a vesicular texture and a mafic composition?
  - a. pumice
  - b. basalt
  - c. granite
  - d. scoria
  
14. Which is the best description of the properties of granite?
  - a. fine-grained and felsic
  - b. coarse-grained and mafic
  - c. coarse-grained and felsic
  - d. fine-grained and mafic
  
15. Which is the best description of the properties of pumice?
  - a. vesicular and felsic
  - b. vesicular and mafic
  - c. non-vesicular and felsic
  - d. non-vesicular and mafic