

Include your name on both this quiz form, and on the scantron form.

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) An igneous rock that shows a vesicular texture \_\_\_\_\_.  
A) appears glassy  
B) must be coarse grained  
C) must be intrusive  
D) contains many small holes, like Swiss cheese
- 2) An igneous rock that cools rapidly is likely to have \_\_\_\_\_ crystals.  
A) large  
B) pink  
C) small  
D) medium-sized
- 3) Which one of the following is an igneous rock?  
A) rhyolite  
B) limestone  
C) slate  
D) quartz
- 4) Which one of the following is a sedimentary rock?  
A) limestone  
B) slate  
C) quartz  
D) rhyolite
- 5) Which one of the following is a metamorphic rock?  
A) rhyolite  
B) slate  
C) quartz  
D) limestone
- 6) Rocks that contain crystals that are roughly equal in size and can be identified with the unaided eye are said to exhibit a \_\_\_\_\_ texture.  
A) glassy  
B) porphyritic  
C) coarse-grained  
D) fine-grained
- 7) Magma that might have cooled slowly to produce a diorite is instead erupted at Earth's surface. It would chill rapidly and produce a(n) \_\_\_\_\_.  
A) rhyolite  
B) granite  
C) andesite  
D) basalt
- 8) Which igneous texture is characterized by two distinctively different crystal sizes?  
A) coarse-grained  
B) fine-grained  
C) porphyritic  
D) glassy
- 9) Granite is \_\_\_\_\_.  
A) fine-grained and dominated by quartz and feldspar crystals  
B) coarse-grained and dominated by quartz and feldspar crystals  
C) fine-grained and dominated olivine, pyroxene and plagioclase feldspar crystals  
D) coarse-grained and dominated by olivine, pyroxene and plagioclase feldspar crystals
- 10) To transform an igneous rock into a sedimentary rock, which of the following processes must take place?  
A) weathering, transport, deposition, and lithification  
B) chemical reactions under conditions of elevated temperature or pressure  
C) melting and recooling, followed by crystallization  
D) impact by a meteorite
- 11) Chemical weathering would be most effective \_\_\_\_\_.  
A) in a cold, dry climate  
B) deep beneath a mountain range  
C) in a warm, dry climate  
D) in a warm, wet climate
- 12) A crystal of potassium feldspar ( $\text{KAlSi}_3\text{O}_8$ ) will produce a variety of weathering products after it is weathered. Which of the following is **not** a product that results from the weathering of potassium feldspar?  
A) silica  
B) potassium ions  
C) iron oxides  
D) clay minerals

- 13) \_\_\_\_\_ is a weak acid that reacts to the mineral calcite.  
A) Carbonic acid                      B) Acetic acid                      C) Nitric acid                      D) Sulfuric acid
- 14) Which kind of rocks are most likely to contain fossils?  
A) igneous                      B) minerals                      C) sedimentary                      D) metamorphic
- 15) Detrital sedimentary rocks are classified and named principally on the basis of \_\_\_\_\_.  
A) rock color                      B) grain size                      C) location                      D) composition
- 16) Which rock type is most likely to have been deposited in a high-energy environment (such as a very turbulent stream)?  
A) chert                                              B) microcrystalline limestone  
C) conglomerate                                      D) shale
- 17) Which of the following rock types represents the highest grade of metamorphism?  
A) phyllite                      B) schist                      C) slate                      D) gneiss
- 18) Limestone is dominated by the mineral \_\_\_\_\_.  
A) hematite                      B) gypsum                      C) quartz                      D) calcite
- 19) Which of the following is the parent rock of marble?  
A) limestone                      B) granite                      C) sandstone                      D) basalt
- 20) Mud cracks and ripple marks are common features of \_\_\_\_\_.  
A) igneous rocks                                      B) metamorphic rocks  
C) sedimentary rocks                                      D) minerals
- 21) Which of the following is a nonfoliated metamorphic rock?  
A) marble                      B) gneiss                      C) conglomerate                      D) slate
- 22) Obsidian is characterized by its \_\_\_\_\_ texture.  
A) vesicular                      B) glassy                      C) fine-grained                      D) coarse-grained
- 23) Layers in sedimentary rocks are called \_\_\_\_\_.  
A) beds                      B) striations                      C) foliation                      D) deposits
- 24) A detrital sedimentary rock with large angular fragments is called a(n) \_\_\_\_\_.  
A) conglomerate                      B) arkose sandstone                      C) breccia                      D) shale
- 25) Rock salt and rock gypsum are examples of \_\_\_\_\_ sedimentary rocks.  
A) biochemical                      B) dented                      C) organic                      D) chemical
- 26) Exfoliation domes are formed from which of the following processes?  
A) oxidation                      B) melting                      C) sheeting                      D) metamorphism
- 27) The reason we see so much mud and sand along the shore of the land is that clay minerals and quartz are \_\_\_\_\_ at Earth's surface.  
A) abundant                      B) exposed                      C) unstable                      D) stable