

Sem#2 - Quiz#1 - Chpt 4-6 Rocks and Minerals

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. Density is the ratio of
a. the volume of a substance to the mass of the substance.
b. the mass of a substance to the weight of the substance.
c. the mass of a substance to the hardness of the substance.
d. the mass of a substance to the volume of the substance.
- _____ 2. Unstable atomic nuclei decay over time into stable nuclei, causing a mineral to be
a. radioactive. c. fluorescent.
b. an ion. d. phosphorescent.
- _____ 3. When magma forms by partial melting, which of the following mineral pairs melt first?
a. feldspar/biotite c. quartz/feldspar
b. biotite/hornblende d. hornblende/quartz
- _____ 4. The process in which one type of rock changes into another type of rock because of chemical processes or changes in temperature and pressure is called
a. sedimentation. c. metamorphism.
b. eruption. d. melting and cooling.
- _____ 5. In regional metamorphism, the change in rocks is the result of
a. changes in temperature and pressure over a large area.
b. activity on one continent.
c. changes that take place only above or only below Earth's surface.
d. limited occurrences in a single region.
- _____ 6. Where are electrons found in atoms?
a. in the electron cloud c. in the atomic ring cycle
b. in the electron zone d. in the electron sphere
- _____ 7. The color of a mineral in powdered form is called the mineral's
a. cleavage. c. streak.
b. fracture. d. luster.
- _____ 8. In stratified layers of sedimentary rock, what is it called when sediment settles on the bottom and large grains settle on top?
a. graded beds c. reverse grading
b. cross-beds d. massive beds
- _____ 9. Which of the following is NOT a common depositional environment?
a. delta c. plain
b. river d. beach

- _____ 10. Light that is reflected from a mineral's surface is called
- a. radioactivity.
 - b. steak.
 - c. refraction.
 - d. luster.
- _____ 11. What type of rock texture results when extreme pressure causes minerals in metamorphic rock to realign, or when minerals separate out into dark and light bands?
- a. foliated
 - b. felsic
 - c. nonfoliated
 - d. mafic
- _____ 12. How do compounds differ from mixtures?
- a. Mixtures are composed of chemically bonded substances; compounds are composed of solutions.
 - b. Compounds are composed of chemically bonded substances; mixtures are composed of substances that are not bonded chemically.
 - c. Compounds are composed of physically bonded substances; mixtures are composed of substances that are not bonded chemically.
 - d. Mixtures are composed of chemically bonded substances; compounds are composed of substances that are not bonded chemically.
- _____ 13. What is an atom that has a different number of neutrons than other atoms of the same element?
- a. isotope
 - b. ion
 - c. molecule
 - d. electron
- _____ 14. Density, color, and boiling point are examples of
- a. physical science.
 - b. chemical properties.
 - c. chemical descriptors.
 - d. physical properties.
- _____ 15. Cleavage is the tendency of a mineral to
- a. break suddenly and without warning.
 - b. split jaggedly, forming irregular surfaces.
 - c. split along specific planes, forming flat surfaces.
 - d. break unevenly with surfaces that are irregular.
- _____ 16. Which of the following is NOT a class of sedimentary rock?
- a. chemical
 - b. volcanic
 - c. clastic
 - d. organic
- _____ 17. What are counted in an atom to determine *mass number*?
- a. electrons
 - b. neutrons
 - c. protons and electrons
 - d. protons and neutrons
- _____ 18. Within each column, or group, on the periodic table, the different elements' atoms usually have the same number of
- a. valence electrons.
 - b. electrons.
 - c. atomic numbers.
 - d. mass numbers.

- _____ 19. Most metamorphic rock forms as a result of
- a. magma flows.
 - b. regional metamorphism.
 - c. foliation.
 - d. chemical contact.
- _____ 20. Three factors that determine whether rock melts are temperature, the presence of fluid in the rock, and
- a. the crystal content.
 - b. pressure.
 - c. air density.
 - d. surrounding rock.