

Earth Science I, Section 200, Fall 2022

Homework

Due: Thursday, August 25 at beginning of class

Review Quiz: 20 pts

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

Signatures \_\_\_\_\_

Note 1: You may work together on these problems. In all cases however, your answers must be your own.

Note 2: It is recommended that you put your answers on a scantron (these can be found at the book store).

1) A \_\_\_\_\_ is a well-tested and widely accepted view that best explains certain scientific observations.

- A) hypothesis
- B) generalization
- C) law
- D) theory

2) The \_\_\_\_\_ explains how our solar system probably formed from a giant cloud of gases and dispersed solid particles.

- A) protogalactic theory
- B) nebular theory
- C) extrastellar solar hypothesis
- D) planetary compression theory

3) The \_\_\_\_\_ refers to the sum total of all life on Earth.

- A) hydrosphere
- B) atmosphere
- C) biosphere
- D) asthenosphere

4) In correct order from the center outward, Earth includes which units?

- A) core, inner mantle, outer mantle, crust
- B) inner core, outer core, mantle, crust
- C) inner core, crust, mantle, hydrosphere
- D) core, crust, mantle, hydrosphere

5) The composition of the Earth's inner core is thought to be \_\_\_\_\_.

- A) basalt
- B) granite
- C) peridotite
- D) solid iron-nickel alloy

6) The asthenosphere is actually a part of the \_\_\_\_\_ of the Earth.

- A) outer core
- B) crust
- C) inner core
- D) mantle

7) The \_\_\_\_\_ is the thinnest layer of the Earth.

- A) crust
- B) outer core
- C) mantle
- D) inner core

8) Which of the following energy sources is thought to drive the lateral motions of Earth's lithospheric plates?

- A) gravitational attractive forces of the Sun and Moon
- B) electrical and magnetic fields localized in the inner core
- C) export of heat from deep in the mantle to the top of the asthenosphere
- D) swirling movements of the molten iron particles in the outer core

9) Active mountain belts are most likely to be found \_\_\_\_\_.

- A) along the margins of continents
- B) in the interior regions of continents
- C) scattered throughout continents
- D) along only the eastern margins of continents

10) The continental shelf is located \_\_\_\_\_.

- A) between the continental slope and continental rise
- B) between the continental rise and the abyssal plains
- C) seaward of the continental slope
- D) landward of the continental slope

11) The most prominent feature on the ocean floor are the \_\_\_\_\_.

- A) deep-ocean trenches
- B) oceanic ridges
- C) seamounts
- D) lava plateaus

12) A(n) \_\_\_\_\_ system is one in which energy moves freely in and out, but no matter enters or leaves the system.

- A) closed
- B) open
- C) feedback
- D) equilibrated

13) What is the source of the energy that powers the Earth system?

- A) the Sun
- B) heat from Earth's interior
- C) both A and B
- D) none of the above

14) All of the following are possible steps of scientific investigation except for \_\_\_\_\_.

- A) the collection of scientific facts through observation and measurement
- B) assumption of conclusions without prior experimentation or observation
- C) the development of one or more working hypotheses or models to explain facts
- D) development of observations and experiments to test the hypotheses

15) The study of Earth's atmosphere is known as \_\_\_\_\_.

- A) astronomy
- B) oceanography
- C) meteorology
- D) cosmology

16) The four main sciences that make up Earth Science are...

- A) Geology, Oceanography, Meteorology and Astronomy
- B) Astronomy, Cosmology, Meteorology, Physical Geology
- C) Physical Geology, Historical Geology, Mineralogy, Atmospheric Science
- D) Geology, Oceanography, Petrology, Mineralogy

17) The \_\_\_\_\_ is thought to be a liquid, metallic region in the Earth's interior.

- A) inner core
- B) lithosphere