
Geol 250 – Final Exam Questions

1. A pitcher has a volume of $100,000 \text{ cm}^3$. What is the volume of the pitcher in **liters**?
2. What would be the mass of the water (in **grams**) that would fill the pitcher in question #1?
3. What would be the mass (in **kilograms**) of a volume of fluid with a density = 2 g/cm^3 that would fill the pitcher in question #1?
4. The Earth revolves around the Sun once every _____ (fill in blank).
5. Rhyolite and granite are both felsic igneous rocks, meaning they have the same [texture / composition] (circle one).
6. [True or False] A 100-year flood has an average recurrence interval of 1,000 years.
7. [True or False] The Sun radiates only in the visible spectrum.
8. [True or False] The Hawaiian Islands are a textbook example of a volcanic island arc formed from subduction.
9. [True or False] High pressure systems are generally associated with the development of large weather systems like warm fronts and cold fronts.
10. [True or False] Seismic P-waves can't travel through the liquid outer core of the Earth but S-waves can. This results in a P-wave shadow on the side of the Earth opposite an earthquake.
11. To reach its dew point temperature, a packet of unsaturated air must usually be [heated / cooled].
12. Which is more likely to be an accurate representation of the natural world, a **scientific theory** or a **scientific hypothesis** (circle one)?
13. Briefly explain one reason that the interior of the Earth is hot enough for magma to sometimes form in Earth's crust.
14. Dry air in the atmosphere is composed primarily of oxygen and what other gas?
15. Name any two common rock forming minerals.
16. Which fundamental force is primarily responsible for the functioning of chemistry?
17. Why do streams flow downhill?
18. What chemical weathering process is responsible for breaking down most of Earth's rock forming minerals?
19. Which type of sedimentary rock is particularly susceptible to dissolution by acid rainwater?
20. What causes seasonality on Earth?
21. Volcanoes are characteristic of what type(s) of plate tectonic boundary(s)?
22. What was William Smith's great contribution to the science of correlating rocks and determining relative timing of geologic events?
23. Benioff Zones are associated with which type of plate boundary?
24. Which of the following are associated with all three types of plate boundaries (circle all that apply):
volcanoes / earthquakes / subduction / hotspots
25. What is the relationship between an earthquake's focus and its epicenter?
26. Explain one specific reason that plate tectonic divergent boundaries are less dangerous to humans than convergent boundaries.

(See answer sheet for questions 27-30)