UVU PS1000 Final

June 22, 2011

Instructor: Tim Wendler
Course: Summer 2011 PS1000 M-W 6-8:45
Name:_____
USE YOUR OWN PAPER AND STAPLE IT TO THIS WHEN YOU ARE DONE

1 No Resources(50 pts)

Take as much or as little room as you need to answer these.

1. Which 2 of the 4 fundamental forces do we deal with most in our daily lives?
2. What is Newton's Third Law?
3. What is Archimedes principle?
4. What is the difference between conduction and convection?
5. What does it mean to conserve a quantity?
6. Describe the process of pole vaulting in terms of energy transfer.
7. Are acoustic waves produced by a speaker compression, transverse or surface waves? How do you know?
8. What would you do with a charge if you wanted to create an electromagnetic wave?
9. Is light a particle or a wave?
10. What is the 2nd Law of Thermodynamics?
11. Name a noble gas. What makes noble gases behave the way they do?
12. Name 3 types of chemical bonds and an example for each of them.
13. When liquids freeze they usually get more dense. Why is water an exception?

14. What element gives us insight into the earth's age and how?
15. What are the three main types of rocks and what makes them distinct from one another?
16. Other than the jigsaw puzzle evidence, name three other pieces of evidence for Pangea.
17. Why does it get colder before it gets hotter as you rise in the earth's atmosphere?
18. What is the most abundant Greenhouse gas?
19. What type of star will our sun eventually become?
20. Explain your location in the universe in detail as you take this test?

2 Open Book(50 pts)

Take as much or a little room as you need to answer these.

1. What chapter was least interesting to you and why?
2. What chapter was most interesting to you and why?
3. What chapter is probably least important to mankind and why?
4. What chapter is probably most important to mankind and why?
5. If you were going to research one *very specific* thing for 10 years, what would you choose and why?
6. Considering Laws governing motion, explain any differences or similarities between Aristotle, Gallileo and Newton.
7. When you rip paper, are you breaking chemical bonds? If so, what kind?
8. Describe in detail the difference between saturated, unsaturated and trans fatty acids.
9. Explain the history of Hawaii's vocanic activity.
10. What evidences support man's contribution to global warming?