

# GLY1000 – The Dynamic Earth

## Answer Key for Exam #1 Test Bank

### Questions Part One: Chapters 1-4

1. A, Mars, Mercury, and Venus
2. C, Jupiter, Saturn, Uranus, and Neptune
3. C, The Milky Way
4. C, Ice and dust
5. C, Pluto has officially demoted from its former status as one of nine major planets in our solar system
6. A, Earth was spherical (round)
7. D, Galileo
8. C, Sun was the center of the Earth's orbit
9. D, Pluto and Eris are now both considered planets
10. D, Wave; wavelength; frequency
11. A, Expanding
12. B, The Universe is considerably older than Earth
13. B, 13.7 Ga ago
14. A, Red shifted
15. A, True
16. E, A and C are both correct
17. D, Large and hot
18. A, Protostar
19. C, Hydrogen and helium
20. B, Very hot
21. B, Denser
22. B, Dipole (such that produced by a bar magnet)
23. B, Becoming less dense
24. B, Oort cloud
25. A, Speed up
26. A, Solar wind particles are directed toward the poles and excite atmospheric gases
27. D, Both are composed of rock and ice
28. C, Volatiles
29. C, Organic materials
30. B, Ocean plains (2.5-4.5 km below sea-level)
31. B, Surficial freshwater, the oceans, groundwater, and atmospheric water
32. C, Iron
33. D, Topography; bathymetry
34. C, Does not have atoms arranged in an orderly pattern
35. D, None of the above are correct
36. B, Granite

- 37. A, And pressure both increasing
- 38. C, Convection
- 39. D, Inner core
- 40. D, 7 to 70 km
- 41. C, Core
- 42. B, Radiation; conduction
- 43. A, Advection
- 44. B, Crust, upper mantle, transition zone, lower mantle, liquid outer core, solid inner core
- 45. A, Considerably more dense
- 46. B, The Moho
- 47. A, Greater portion of silica
- 48. B, Oceanic crust
- 49. A, Chemistry (mineral content); degree of physical rigidity
- 50. C, Cooler and less able to flow
- 51. D, All of the above are correct
- 52. D, All of the above are correct
- 53. D, Cannot be directly proven
- 54. A, Hess and Dietz
- 55. D, Lower west coast of Africa; east coast of North America
- 56. D, Combined to form a supercontinent (he termed Pangaea) in the Late Paleozoic through the Mesozoic
- 57. A, Can be used to infer the ancient climate of the Earth; they are deposited in environments that are restricted to warm climate.
- 58. A, Africa
- 59. B, Glossopteris
- 60. A, Magnetite
- 61. D, All of the above are correct
- 62. C, 1,500 km
- 63. B, False
- 64. B, Magnetic declination
- 65. B, False
- 66. B, Guyots
- 67. C, 200 million
- 68. D, Military needs in WW2
- 69. B, Gabbro, basalt
- 70. C, At the edges of ocean basins
- 71. C, Had normal polarity
- 72. B, Sea-floor spreading rates are relatively rapid
- 73. A, Mid-ocean ridges
- 74. C, Incorporates and explains both sea-floor spreading and continental drift
- 75. C, A continental coastline that coincides with a plate boundary
- 76. B, Passive margins

- 77. B, False
- 78. A, Active margins
- 79. C, Oceanic or continental lithosphere or a combination of both
- 80. B, The presence of an earthquake belt
- 81. B, Ocean trenches
- 82. A, True
- 83. C, Temperature (the lithosphere is cooler than the asthenosphere)
- 84. A, True
- 85. D, Initially less dense at the age of formation, but eventually becomes more dense
- 86. A, True
- 87. B, Divergent plate boundaries
- 88. A, Convergent
- 89. A, Convergent
- 90. C, 670 km
- 91. B, Divergent
- 92. B, An oceanic plate subducts beneath another oceanic plate
- 93. C, Within a downgoing plate at a subduction zone
- 94. B, False
- 95. A, Hot-spot volcanism
- 96. C, An extinct oceanic hot-spot volcano that has subsided below sea level
- 97. B, Plates
- 98. C, Within either continental or oceanic plates
- 99. B, Collision and mountain formation
- 100. C, The Basin and Range Province; Himalayan Mountains

### **Questions Part Two: Chapters 4-8**

- 1. B, Ore minerals
- 2. F, B and C are both correct
- 3. C, Petroleum
- 4. D, A fixed crystalline structure (spatial arrangement of atoms and ions)
- 5. A, True
- 6. C, Halite
- 7. B, X-ray diffraction
- 8. B, False
- 9. C, Does not have a fixed crystalline structure
- 10. B, The crystals have abundant room to grow in their hollow surroundings
- 11. D, The bank accounts of rock shop owners
- 12. B, False
- 13. A, True
- 14. B, Electron, proton, nucleus, atom
- 15. A, Chloride is chlorine's anion
- 16. A, Hydrogen bonds; van der Waals bonds