

Dynamic Planet Div. C Answer Key

1. C
2. E
3. K
4. J
5. D
6. A
7. F
8. G
9. B
10. H
11. N
12. O
13. T
14. L
15. R
16. S
17. M
18. Q
19. V
20. P
21. Steno
22. Hutton
23. Wegener
24. Holmes
25. Hess
26. McKenzie
27. Benioff
28. Ortelius
29. Du Toit
30. Runcorn
31. Mantle Convection
32. Mantle Plume
33. Wilson Cycle
34. Terranes
35. Orogenic Belts or Orogenesis
36. Aulacogens
37. Hot Spots
38. Isostatic Adjustment
39. Hypsometry
40. Bathymetry
41. Landslide
42. Magma
43. Wadati-Benioff Zone/subduction zone
44. 5 cm/year
45. The Moho
46. Geodynamo
47. Marianas Trench
48. The Ring of Fire
49. b. Hekla
e. Erta Ale
50. a. Mauna Loa
d. Falcon
51. 9
52. 10
53. 4
54. 5
55. 1
56. 2
57. a. 8 b. angular unconformity
58. a. 3 b. nonconformity
59. 11
60. a. 7 b. reverse fault
61. a. 6 b. anticline
62. 10
63. 1
64. 2
65. 5
66. 7
67. 3
68. a. 4 b. angular unconformity
69. a. 6 b. disconformity
70. a. 8 b. disconformity
71. a. 9 b. fault
72. 11
73. Normal Fault
74. Low-Angle Reverse Fault
75. Listric Normal Fault
76. High-Angle Reverse Fault
77. Anticline
78. Syncline
79. Monocline
80. Homocline
81. Dome
82. Basin

83. the state of gravitational equilibrium between Earth's crust and mantle such that the crust "floats" at a certain elevation

84. (plate) thickness (1 pt) and density (1 pt)

85. isostatic rebound

86. The hypocenter is the point within the crust from which an earthquake's energy is first released (1 pt), while the epicenter is the point on the Earth's surface directly above the hypocenter (1 pt).

87. respiratory problems, water supply fouling, shut down of hydroelectric systems, fish and wildlife, nuisances of ash clean up, plane engines, death from inhalation, loss of tourism, birds, crops, loss of ski season (need at least 3 examples for full points)

88. soil buildup of positive nutrients, increase tourism due to curiosity and scenery, island arcs and other land building, increase in public awareness of emergency preparation, relocation of endangered towns and cities, geothermal energy (need at least 3 examples for full points)

89. $10^{(9.0 - 6.0)} = 1000$ times more intense (1 pt for work, 1 pt for correct answer)

90. $10^{1.5 \times (9.0 - 6.0)} = 31623$ times as much energy (1 pt for work, 1 pt for correct answer)

Tie breaker questions in the following order:
43, 29, 40, 89, 30, 44