

Dynamic Planet Answer Key

1. 15 points (1 per plate)

- A. Juan de Fuca Plate
- B. Pacific Plate
- C. Cocos Plate
- D. North American Plate
- E. Caribbean Plate
- F. Nazca Plate
- G. South American Plate
- H. Scotia Plate
- I. African Plate
- J. Eurasian Plate
- K. Arabian Plate
- L. Indo-Australian Plate
- M. Philippine Plate
- N. Antarctic Plate
- O. Okhotsk Plate

2. Transform (1 point)

3. Convergent (1 point)

4. Convergent (1 point)

5. Divergent (1 point)

6. Pacific Plate and North American Plate (1 point)

7. 10 points (1 point for each event placed within 50 million years of correct)

- A. Breakup of Gondwanaland:
- B. Breakup of Rodinia: 750 mya
- C. Breakup of Pangea: 200 mya
- D. Breakup of Pannotia: 600 mya
- E. Formation of Gondwanaland: 450 mya
- F. Formation of the Rocky Mountains: 60 mya
- G. Formation of the Himalayas: 50 mya
- H. Separation of Australia from Antarctica: 50 mya
- I. Separation of Laurasia from Gondwanaland: 150 mya
- J. Separation of North America from Eurasia: 80 mya

8. Normal Fault (1 point)

9. Reverse Fault (1 point)

10. Strike-slip Fault (1 point)

11. 7 points (1 point each)

- top (left to right): submarine canyon, shoreline, land

- bottom (left to right): abyssal plains, continental rise, continental slope, continental shelf

12. mountains volcanoes trenches subduction zones island arc
(2 points)

13. mountains volcanoes trenches subduction zones island arc
(4 points)

14. mountains volcanoes trenches subduction zones island arc
(4 points)

15. 10 points (2 points each)

A. Mafic

B. Intermediate

C. Intermediate

D. Mafic

E. Felsic

16. 4 points (1 point per blank)

A. Crust and Mantle

B. Lithosphere and Asthenosphere

17. Convection currents in the Earth's mantle (2 points)

18. The flow of liquid iron in the Earth's outer core. (2 points)

19. Due to isostasy, the mountain roots are surrounded by the Earth's mantle, which is more dense than them. (2 points)

Multiple Choice: 30 points (1 point per question)

20. D

21. C

22. D

23. A

24. D

25. B

26. C

27. A

28. B

29. D

30. D

31. A

32. C

33. A

34. B

35. A

36. D

37. A

38. D

39. A

40. C

41. F

42. B

43. C

44. B

45. B

46. A

47. A

48. A

49. C