

**2006 NSO Finals/Solar System Event**

**Mars: The Fourth Rock**

School Name: \_\_\_\_\_ Team # B - \_\_\_\_\_

Participants: \_\_\_\_\_  
\_\_\_\_\_

**Student Response Sheet**

**Part I: Kepler's Laws of Planetary Motion**

- 1. (1) \_\_\_\_\_
- 2. (1) \_\_\_\_\_
- 3. (1) \_\_\_\_\_
- 4. (1) \_\_\_\_\_
- 5. (1) \_\_\_\_\_
- 6. (1) \_\_\_\_\_
- 7. (1) \_\_\_\_\_
- 8. (2) \_\_\_\_\_
- 9. (2) \_\_\_\_\_
- 10. (1) \_\_\_\_\_
- 11. (1) \_\_\_\_\_

Maximum values of answers are stated in parentheses.

Tie-breakers are those answers with a value of 3 points. These will be evaluated in sequential order.

**Part II: Atmosphere, Temperature, and Seasons**

- 12. (1) \_\_\_\_\_
- 13. a. (1) \_\_\_\_\_  
b. (1) \_\_\_\_\_

14. a. (1) \_\_\_\_\_

b. (1) \_\_\_\_\_

c. (1) \_\_\_\_\_

15. (2) \_\_\_\_\_

16. (2) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

17. (2) \_\_\_\_\_

18. (2) \_\_\_\_\_

19. (2) \_\_\_\_\_

20. (2) \_\_\_\_\_

21. (3) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

22. (2) \_\_\_\_\_

23. (2) \_\_\_\_\_

24. (2) \_\_\_\_\_

25. (2) \_\_\_\_\_

26. (2) \_\_\_\_\_

27. a. (3) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. (2) \_\_\_\_\_  
\_\_\_\_\_

28. a. (2) \_\_\_\_\_

b. (2) \_\_\_\_\_  
\_\_\_\_\_

c. (2) \_\_\_\_\_

**Part III: Geologic Activity and Features**

29. (3) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

30. (2) \_\_\_\_\_

31. (3) \_\_\_\_\_

32. (2) \_\_\_\_\_  
\_\_\_\_\_

33. (3) \_\_\_\_\_

34. a. (2) \_\_\_\_\_

b. (2) \_\_\_\_\_

c. (2) \_\_\_\_\_

35. (2) \_\_\_\_\_

36. (1) \_\_\_\_\_

37. (2) \_\_\_\_\_

38. (2) \_\_\_\_\_

39. (2) \_\_\_\_\_

\_\_\_\_\_

40. (2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

41. (2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

42. (2) \_\_\_\_\_

43. (2) \_\_\_\_\_

44. (2) \_\_\_\_\_

45. (2) \_\_\_\_\_

46. (3) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

47. (2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

48. (3) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

49. (3) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

50. (2) \_\_\_\_\_

51. (3) \_\_\_\_\_

52. (2) \_\_\_\_\_

53. a. (2) \_\_\_\_\_  
\_\_\_\_\_

b. (2) \_\_\_\_\_  
\_\_\_\_\_

54. a. (0) \_\_\_\_\_

b. (0) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The Martian map used in this activity may be purchased from Other Worlds Educational Enterprises. See <http://www.otherworlds-edu.com>