Huntley 2017
Rocks and Minerals

Score: __________/106

***Tie breakers will be determined by the first team to get a question wrong in the test order***
Station 1

Name each specimen in the tray.

1. Alabaster
2. Orthoclase (feldspar)
3. Calcite (davospar)
4. Satin Spar
5. Talc
6. Halite

Station 2

Classify each specimen in the tray as felsic, andesitic, mafic, or ultramafic

7. Mafic
8. Felsic
9. Mafic
10. Andesitic
11. Andesitic
12. Ultramafic
Station 3

Fill in the correct term(s) to complete the rock cycle.

13. Igneous Rocks
14. Weathering + Erosion
15. Deposition + Lithification
16. Metamorphic Rocks
17. Heat + Pressure
18. Sedimentary Rocks
19. Melting
20. Cooling + Crystallization

Station 4

List all applicable textures for each specimen in the tray.

21. porphyritic
22. foliated, coarse grained
23. well sorted, coarse grained
24. glassy, frothy
25. porphyritic
26. vesicular, fine grained
Station 5

Answer the questions below.

26. Oxygen
27. Silicates
28. It does not have a crystal structure

29. Naturally occurring
    inorganic
    solid
    crystal structure
    definite chemical formula

18

Station 6

Put the rock samples (use their ID #) in order of metamorphic grade from highest to lowest.

   A (high grade)

   B

   C

   D

   E (low grade)

15
Station 7

Name each specimen in the tray.

30. orthoclase
31. Quartz
32. Albite
33. Amazonite (microcline)
34. hypersthen orthoclase
35. feldspar/orthoclase
36. Augite

Station 8

List the best possible environment of formation (from the word bank) for each specimen.

Bank: Swamp, Deep ocean, Shallow Ocean, Landslide, Wind formed dune, Beach,

37. shallow ocean
38. shallow ocean
39. beach
40. shallow ocean
41. landslide
42. landslide
Station 9

Classify each specimen as biochemical, chemical, or clastic.

43. biochemical
44. biochemical
45. biochemical
46. biochemical
47. clastic
48. clastic

Station 10

Identify the crystal system of each of the following minerals

49. isometric
50. hexagonal
51. isometric
52. hexagonal
53. triclinic
54. hexagonal
Station 11
Suppose the following rocks were heated to 2,000° C. Identify the major mineral (> 10% total composition) that would melt first from each rock.

55. Quartz
56. Plagioclase
57. Plagioclase
58. Plagioclase
59. Plagioclase
60. Olivine

Station 12
Determine the hardness of each of these minerals.

61. 4
62. 5
63. 6.0 - 6.5
64. 6.5 - 7
65. 6.5 - 7
66. 3.5 - 4.0
Station 13
Write in the correct answer to the multiple choice questions form the station.

67. D
68. C
69. D
70. B
71. B
72. B
73. E
74. C
75. B
76. D

/10
Station 14

Write in the correct answer to the multiple choice questions from the station.

77. A
78. A
79. B
80. B
81. B
82. C
83. D
84. C
85. A
86. A
Station 15

Write in the correct answer to the multiple choice questions form the station.

87. A
88. A
89. C
90. B
91. A
92. B
93. D
94. B
95. C
96. D