

Rocks and Minerals – answer key

Station 1:

1. Identify specimen a: Graphite
2. Identify specimen b: Pyrite
3. Identify specimen c: Olivine
4. What is the chemical formula for specimen C? $(\text{Fe, Mg})\text{SiO}_2$

Station 2:

5. Identify specimen a: Quartzite
6. Identify specimen b: Diorite
7. Identify specimen c: Pumice
8. Identify specimen d: Fluorite
9. True or false? Specimen D could scratch a penny. True
10. Which specimen is a metamorphic rock? A

Station 3:

11. Identify specimen a: Sphalerite
12. Identify specimen b: Albite
13. Identify specimen c: Shale
14. To which class does specimen A belong? Sulfide Class

Station 4:

15. Identify specimen a: Gneiss
16. Identify specimen b: Basalt
17. Identify specimen c: Obsidian
18. What type of fracture type does specimen C exhibit? Conchoidal
19. Which, if any, of these specimens are *extrusive*? B and C

Station 5:

20. Identify specimen a: Sulfur
21. Identify specimen b: Hematite
22. Identify specimen c: Galena
23. Identify one use of specimen C, other than as an ore. Used as the crystal in early radios.

Station 6:

24. Identify specimen a: Marble
25. Identify specimen b: Slate
26. Identify specimen c: Bituminous coal
27. What would be the effect of adding HCl to specimen B? No reaction

Station 7:

28. Identify specimen a: Calcite
29. Identify specimen b: Corundum
30. Identify specimen c: Beryl
31. Identify specimen d: Granite
32. What type of cleavage does specimen A exhibit? rhombohedral

Station 8:

33. Identify specimen a: Phyllite
34. Identify specimen b: Andesite
35. Identify specimen c: Rhyolite
36. Identify specimen d: Arkose
37. Which of these specimens is the volcanic equivalent of plutonic granite? C

Station 9:

38. Identify specimen a: Microcline
39. Identify specimen b: Chalcedony
40. Identify specimen c: Rose Quartz
41. Identify specimen d: Coquina
42. How is specimen D formed? Cementation of coarse shells on sea floor

Station 10:

43. Identify specimen a: Halite
44. Identify specimen b: Satin Spar Gypsum
45. Identify specimen c: Gabbro
46. Identify specimen d: Conglomerate
47. What are the sheetlike, saucer-shaped intrusions of specimen D called? lopoliths

Station 11:

48. Identify specimen a: Milky Quartz
49. Identify specimen b: Apatite
50. Identify specimen c: Magnetite
51. What type of crystal structure does specimen B have? hexagonal

Station 12:

52. Identify specimen a: Garnet Schist
53. Identify specimen b: Muscovite
54. Identify specimen c: Lepidolite
55. Identify the class and group of specimen B. Silicate Class, Mica Group

Station 13:

56. Identify specimen a: Talc
57. Identify specimen b: Kaolinite
58. Identify specimen c: Biotite
59. Which specimen is used as an ingredient in a remedy for upset stomachs? B

Station 14:

60. Identify specimen a: Dolomite rock
61. Identify specimen b: Travertine
62. Identify specimen c: Scoria
63. How does specimen b form? Droplets of carbonate-rich cave water lose CO₂ to the air

Station 15:

64. Identify specimen a: Sandstone
65. Identify specimen b: Hornblende
66. Identify specimen c: Selenite Gypsum