

# 2017 Official Science Olympiad Rock and Mineral List

## Minerals

### **Native Elements**

- 16. Copper
- 18. Diamond
- 25. Gold
- 26. Graphite
- 50. Silver
- 54. Sulfur

### **Borates**

- 59. Ulexite

### **Carbonates**

- 5. Aragonite
- 7. Azurite
- 13. Calcite
- 19. Dolomite
- 36. Malachite

### **Halides**

- 22. Fluorite
- 30. Halite

### **Hydroxides**

- 8. Bauxite

### **Oxides**

- 17. Corundum
- 24. Goethite/Limonite
- 31. Hematite
- 35. Magnetite

### **Phosphates**

- 4. Apatite

### **Sulfates**

- 9. Barite
- 14. Celestite

### **Gypsum varieties**

- 27. Alabaster
- 28. Satin Spar
- 29. Selenite

### **Sulfides**

- 12. Bornite
- 15. Chalcopyrite
- 23. Galena
- 40. Pyrite
- 52. Sphalerite

### **Silicates**

- 6. Augite
- 10. Beryl
- 20. Epidote
- 32. Hornblende
- 33. Kaolinite
- 38. Olivine
- 39. Opal
- 49. Rhodonite
- 51. Sodalite
- 53. Staurolite
- 55. Talc
- 56. Topaz
- 57. Tourmaline group
- 58. Tremolite

### **Feldspar - Plagioclase Series**

- 1. Albite

### **Feldspar – potassium feldspar**

- 3. Microcline [Amazonite]
- 21. Orthoclase

### **Garnet group**

- 2. Almandine

### **Mica Group**

- 11. Biotite
- 34. Lepidolite
- 37. Muscovite

### **Quartz varieties**

- 41. Agate/Onyx
- 42. Amethyst
- 43. Chalcedony
- 44. Citrine
- 45. Crystal
- 46. Jasper
- 47. Milky Quartz
- 48. Rose Quartz

## Rocks

### **Metamorphic**

- 60. Gneiss
- 61. Marble
- 62. Phyllite
- 63. Quartzite
- 64. Schist [Garnet]
- 65. Schist [Mica]
- 66. Slate

### **Igneous**

- 67. Andesite
- 68. Basalt
- 69. Diorite
- 70. Gabbro
- 71. Granite
- 72. Obsidian
- 73. Pegmatite
- 74. Pumice
- 75. Rhyolite
- 76. Scoria

### **Sedimentary**

- 78. Arkose
- 80. Breccia
- 81. Chert
- 82. Conglomerate
- 84. Diatomite
- 85. Dolomite Rock/Dolostone
- 92. Sandstone
- 93. Shale

### **Coal varieties**

- 77. Anthracite
- 79. Bituminous
- 86. Lignite

### **Limestone varieties**

- 87. Chalk
- 83. Coquina
- 89. Fossiliferous limestone
- 90. Oolitic limestone
- 91. Travertine

The following minerals may appear at the National Tournament:  
Actinolite, Kyanite, Labradorite [plagioclase feldspar series], Pyrolusite,  
Rhodochrosite, Rutile, Spodumene, Stilbite, Turquoise, Zircon  
\*Specimen numbers are the same as in previous and current Science Olympiad  
Rock and Mineral Kits that may be ordered from Wards Science Olympiad Kits.