**Word Bank**

**Mineral Basics**

All of these words for minerals and abbreviations for elements are used in the crossword puzzle:

Augite

Biotite

Calcite

Carbonate

Chalcopyrite

Cleavage

Conchoidal

Cu

Fe

Feldspar

Fluorite

Galena

Garnet

Graphite

Gypsum

Halite

Hematite

Hornblende

Luster

Magnetite

Mohs

Muscovite

Na

Olivine

Pb

Plagioclase

Potassium

Pyrite

Quartz

Refraction

Rose

Silicates

Sphalerite

Streak

Sulfide

Sulfur

Talc

**Across**

5. 6 planes of cleavage, ZnS

7. mineral group including calcite and dolomite

9. planes of weakness in a mineral

13. cubic crystals; “fool’s gold”

16. reddish streak; iron oxide

17. colorless mica; one direction of cleavage

18. halide with cubic habit and octahedral cleavage

20. hardness of 1; one direction of cleavage

23. yellow native element

24. dodecahedral habit; red gemstone

25. largest group of minerals on Earth

27. chemical abbreviation for lead

28. chemical abbreviation is K

30. copper iron sulfide with a brassy luster

31. magnetic mineral

32. dark green amphibole; two cleavages not at 90°

**Down**

1. two directions of cleavage at 90°; twinning striations

2. effervesces easily in dilute HCl

3. pink variety of quartz

4. lead sulfide with three directions of cleavage at 90°

6. cubic habit and cleavage; salty taste

8. double \_\_\_\_\_\_\_\_\_\_; calcite makes this optical effect

9. chemical abbreviation for copper

10. hardness of 1; same chemical composition as diamond

11. dark green pyroxene; two cleavages at 90°

12. varies of K-\_\_\_\_\_\_\_\_\_ include microcline and orthoclase

14. chemical abbreviation for iron

15. chemical abbreviation for sodium

19. reflection of light from a mineral; includes metallic and non-metallic

21. fracture seen in quartz

22. hardness scale for minerals

24. varieties include alabaster, satin spar, and selenite; hardness of 2

25. mineral group consisting of a metal and sulfur; includes pyrite and galena

26. hexagonal crystals; hardness of 6; SiO2

29. color of a mineral when powdered

33. sugary, granular appearance; always green

34. brown mica; one direction of cleavage

**Key**

Using <http://puzzlemaker.discoveryeducation.com/code/BuildCrissCross.asp>

Title: Mineral Basics

Input: word then space then clue

Augite dark green pyroxene; two cleavages at 90°

Biotite brown mica; one direction of cleavage

Calcite effervesces easily in dilute HCl

Carbonate mineral group including calcite and dolomite

Chalcopyrite copper iron sulfide with a brassy luster

Cleavage planes of weakness in a mineral

Conchoidal fracture seen in quartz

Cu chemical abbreviation for copper

Fe chemical abbreviation for iron

Feldspar varies of K-\_\_\_\_\_\_\_\_\_ include microcline and orthoclase

Fluorite halide with cubic habit and octahedral cleavage

Galena lead sulfide with three directions of cleavage at 90°

Garnet dodecahedral habit; red gemstone

Graphite hardness of 1; same chemical composition as diamond

Gypsum varieties include alabaster, satin spar, and selenite; hardness of 2

Halite cubic habit and cleavage; salty taste

Hematite reddish streak; iron oxide

Hornblende dark green amphibole; two cleavages not at 90°

Luster reflection of light from a mineral; includes metallic and non-metallic

Magnetite magnetic mineral

Mohs hardness scale for minerals

Muscovite colorless mica; one direction of cleavage

Na chemical abbreviation for sodium

Olivine sugary, granular appearance; always green

Pb chemical abbreviation for lead

Plagioclase two directions of cleavage at 90°; twinning striations

Potassium chemical abbreviation is K

Pyrite cubic crystals; “fool’s gold”

Quartz hexagonal crystals; hardness of 6; SiO2

Refraction double \_\_\_\_\_\_\_\_\_\_; calcite makes this optical effect

Rose pink variety of quartz

Silicates largest group of minerals on Earth

Sphalerite 6 planes of cleavage, ZnS

Streak color of a mineral when powdered

Sulfide mineral group consisting of a metal and sulfur; includes pyrite and galena

Sulfur yellow native element

Talc hardness of 1; one direction of cleavage

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