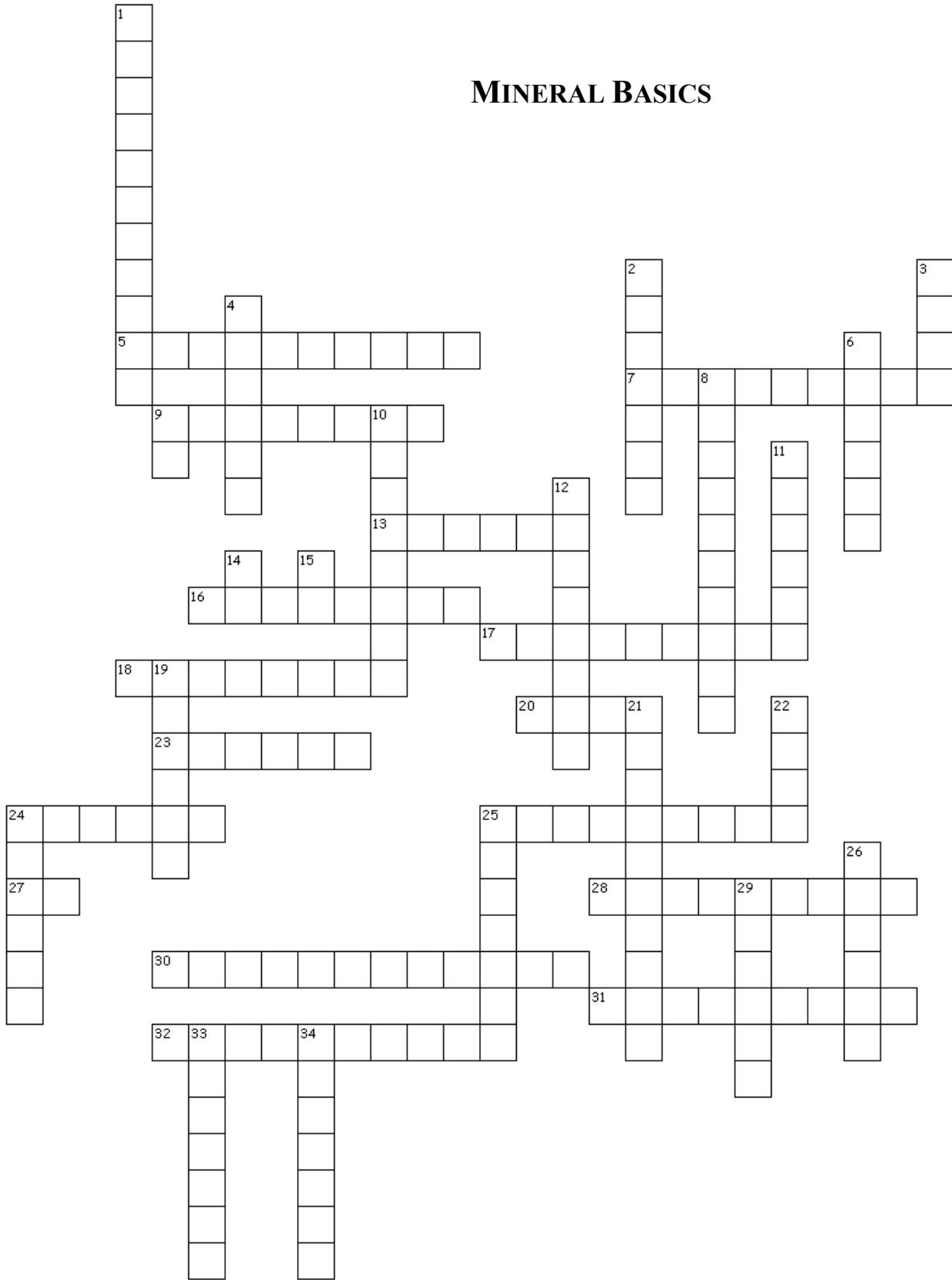


MINERAL BASICS



Word Bank

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

Augite	Fe	Hematite	Pb	Sphalerite
Biotite	Feldspar	Hornblende	Plagioclase	Streak
Calcite	Fluorite	Luster	Potassium	Sulfide
Carbonate	Galena	Magnetite	Pyrite	Sulfur
Chalcopyrite	Garnet	Mohs	Quartz	Talc
Cleavage	Graphite	Muscovite	Refraction	
Conchoidal	Gypsum	Na	Rose	
Cu	Halite	Olivine	Silicates	

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