

**WORKSHEET****Vocabulary**

Unscramble the words below using the following clues. Write the unscrambled words in the spaces provided.

## CLUES

1. any substance that cannot be broken down chemically into simpler substances
2. a naturally occurring, solid, inorganic substance with a definite chemical composition
3. a charged atom
4. atoms of the same element with different mass numbers
5. anything with mass and volume
6. smallest part of a compound with the properties of that compound
7. has a regular geometric form
8. a mineral composed of a single element
9. the smallest part of an element with the properties of that element
10. two or more elements chemically combined
11. bond formed when electrons are shared
12. positively charged atomic particle
13. number of protons in an atom
14. elements that easily lose electrons to form positive ions
15. total number of protons and neutrons in an atom
16. negatively charged atomic particle
17. elements that easily gain electrons to form negative ions
18. atomic particle with no charge
19. compounds of silicon, oxygen, and metals

1. MEENTLE \_\_\_\_\_
2. NREALMI \_\_\_\_\_
3. NOI \_\_\_\_\_
4. SEOOTPI \_\_\_\_\_
5. ETMTAR \_\_\_\_\_
6. OEUCLEML \_\_\_\_\_
7. YRCSTLA \_\_\_\_\_
8. AETVNI \_\_\_\_\_
9. TAMO \_\_\_\_\_
10. MCPNOODU \_\_\_\_\_
11. VCELNATO \_\_\_\_\_
12. ROOTPN \_\_\_\_\_
13. COITMA MNBRUE \_\_\_\_\_
14. STMAEL \_\_\_\_\_
15. SAMS MNBRUE \_\_\_\_\_
16. CELRENTA \_\_\_\_\_
17. SNNMOTAEL \_\_\_\_\_
18. NRTEUNO \_\_\_\_\_
19. IICLSEATS \_\_\_\_\_

## Interpreting and Applying

Figure 3.1 shows the atomic structures and crystal shapes of two minerals. For Questions 20–28, determine whether any of the statements below apply to either of the two minerals. Then write A, B, both, or neither in the spaces provided next to the appropriate statements.

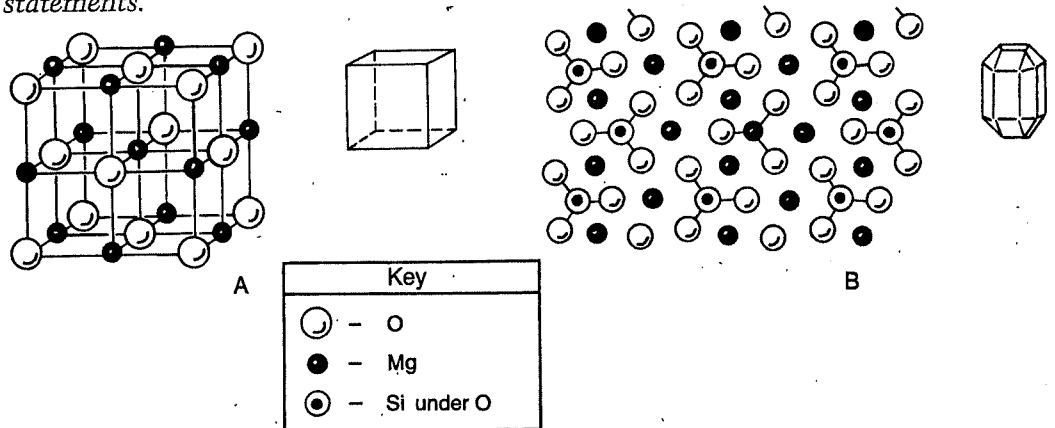


Figure 3.1

- \_\_\_\_\_ 20. consists mainly of silica tetrahedrons
- \_\_\_\_\_ 21. arrangement of each ionic unit is similar to that of halite
- \_\_\_\_\_ 22. will cleave into cubes
- \_\_\_\_\_ 23. will not cleave along smooth planes
- \_\_\_\_\_ 24. shape belongs to the triclinic system
- \_\_\_\_\_ 25. crystal shape belongs to the cubic system
- \_\_\_\_\_ 26. is a silicate mineral
- \_\_\_\_\_ 27. is not a native mineral
- \_\_\_\_\_ 28. has the same crystal shape as quartz

Using the periodic table in Appendix A of your textbook (pages 646–647), complete items 29–39 in the table below (Figure 3.2). Be sure to round off all numbers to the nearest whole number.

Element	Symbol	Atomic Number	Mass Number	Number of Protons	Number of Electrons	Number of Neutrons
29.	Ag					
30.	silicon					
31.			16			
32.	zinc					
33.	Al					
34.				8		
35.	carbon					
36.	Fe					
37.			29			
38.	helium					
39.				7		

Figure 3.2