

# Exercise 6.3e

## Ionic Bonding Crossword

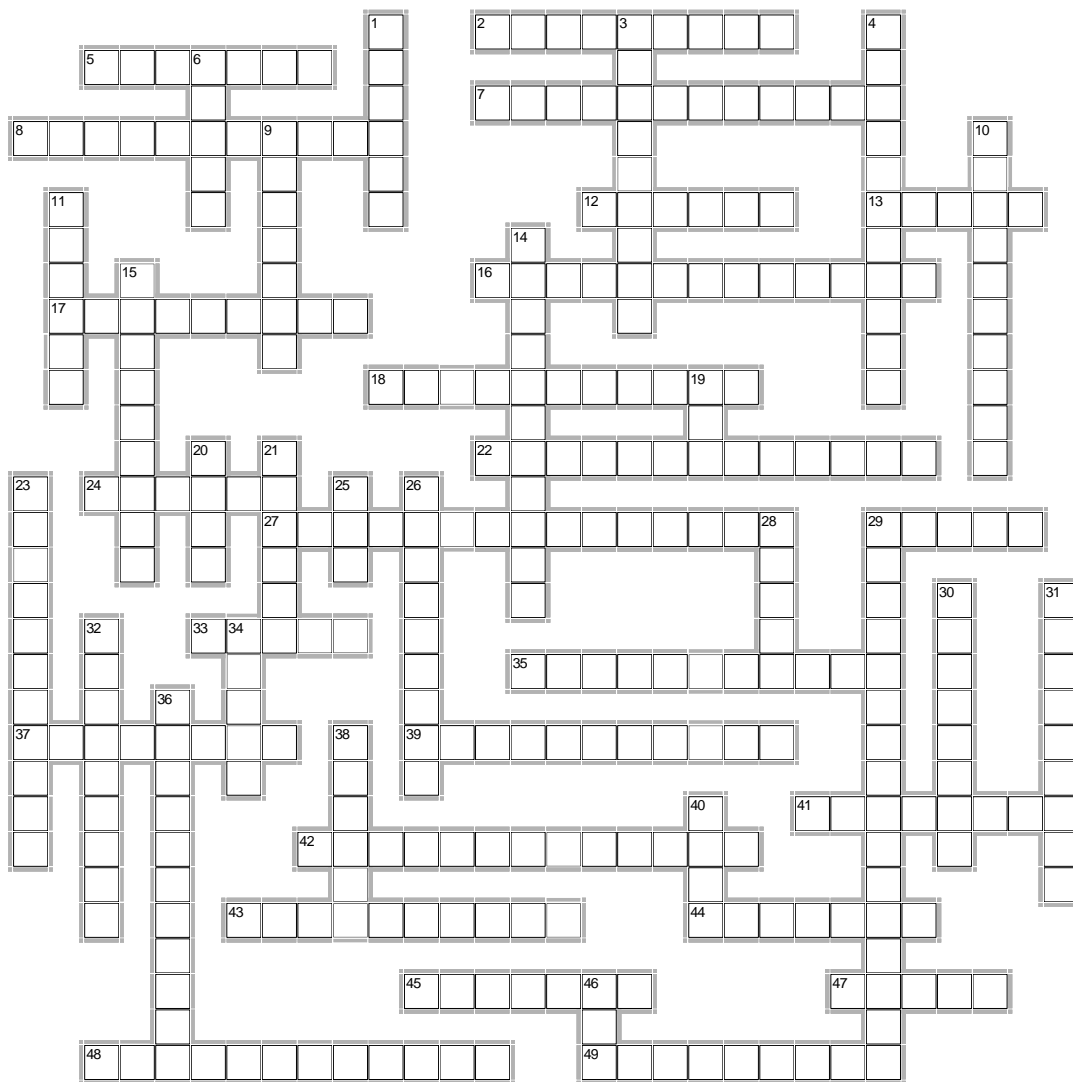
Name: \_\_\_\_\_

Date: \_\_\_\_\_ Per: \_\_\_\_\_

**DIRECTIONS:** Fill in the crossword using the clues below and your knowledge of ionic bonding.

### Across

2. An electrostatic attraction between oppositely charged particles.
5.  $\text{SO}_4^{2-}$
7. Alloys where small atoms of another metal fill in the spaces between larger atoms.
8. The model used to describe electron movement in metallic bonds.
12. This is released when an ionic compound forms.
13. A mixture of elements that has metallic properties.
16. Type of force that holds ions together.
17.  $\text{PO}_4^{3-}$
18. A reaction that absorbs energy.
22.  $\text{NaNO}_3$
24. An atom that has lost one or more electrons.
27.  $\text{NaOH}$
29. Magnesium bromide
33. Barium nitride.
35. Structure of most ionic compounds - repeating patterns of ions.
37. Nickel (II) tartrate.
39. These are placed around a polyatomic ion when there are more than one in an ionic compound's formula.
41.  $\text{NH}_4^+$
42. Energy required to separate one mole of ions of an ionic compound.
43. Type of ion made of multiple atoms.
44. Ammonium chlorate.
45.  $\text{C}_2\text{H}_3\text{O}_2^-$
47. The number of electrons in most octets.
48. A force that holds two atoms together.
49. A rule that states atoms tend to gain, lose, or share electrons in order to acquire a full set of valence electrons.



EclipseCrossword.com

### Down

1. Elements that tend to lose electrons in an ionic bond.
3.  $\text{CO}_3^{2-}$
4. Free electrons.
6. The cation is always listed \_\_\_\_\_ in an ionic formula.
9. Electrical charge of an ionic compound.
10. A reaction that releases energy.
11. Strontium monohydrogen phosphate.
14. A substance soluble in water that conducts electricity.
15. Elements that tend to gain electrons when bonding.
19. An atom that has gained or lost electrons.
20. Melting point for ionic compounds is usually \_\_\_\_\_.
21. Tin (II) thiosulfate.
23. The old name for the hydrogen carbonate ion.
25. Ending used to show a non-metal has become a negative ion.
26. Used to indicate the number of an ion present in a compound.
28. The total charges of cations and anions in an ionic compound.
29.  $\text{MgBr}_2$
30. Type of bond that holds a polyatomic ion together.
31. Type of ion made of only one element.
32.  $\text{ZnO}$
34. An atom that has gained one or more electrons.
36.  $\text{SCN}^-$
38. Type of compound made of only two elements.
40. Silver cyanide.
46. The number of electrons needed to fill the smallest octet.