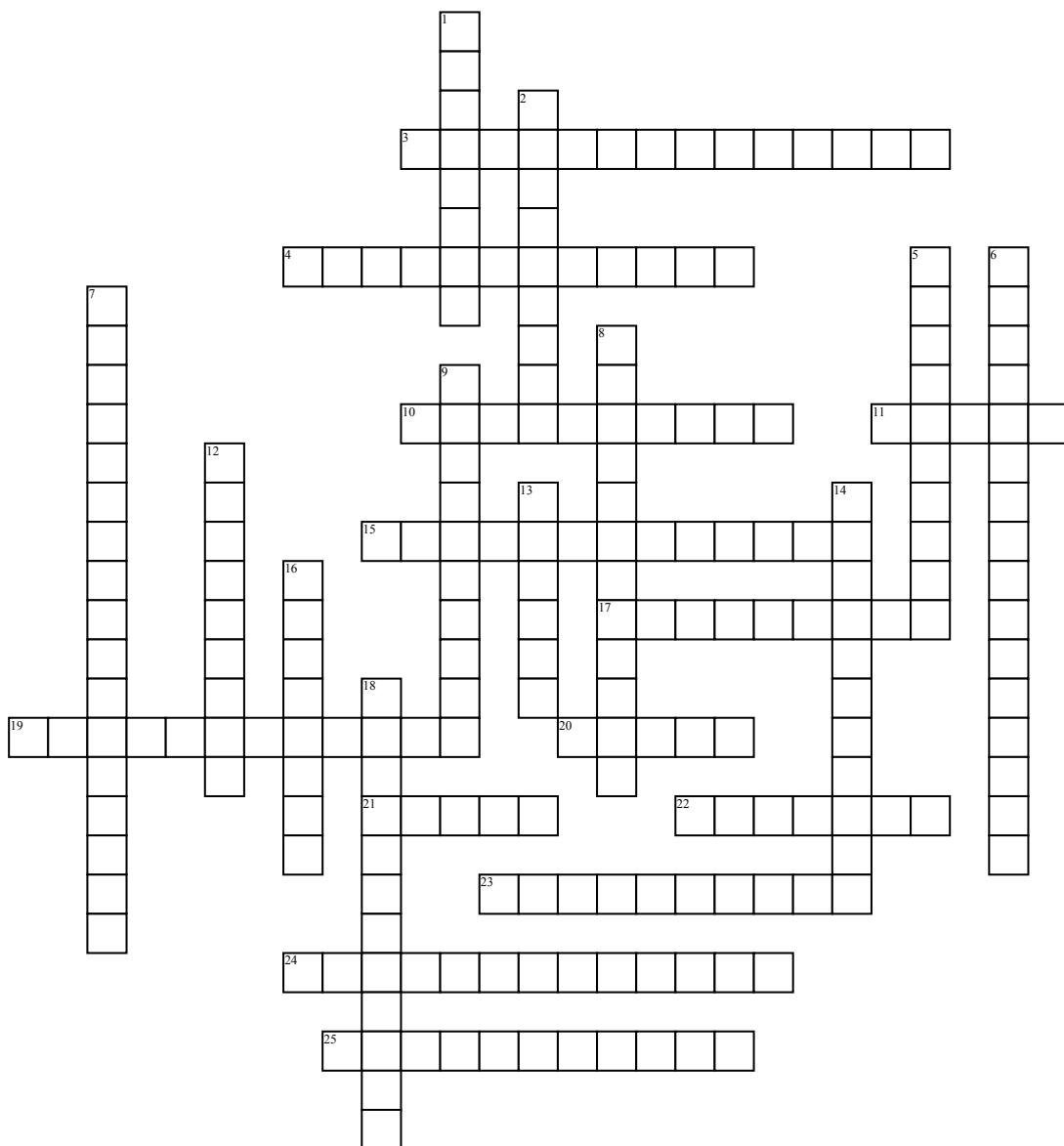


Name: _____

Date: _____

Bonding



Across

3. diagrams that show the bonding between atoms of a molecule and the lone pairs of electrons that may exist in the molecule.
 4. What is a mutual electrical attraction between the nuclei and valence electrons?
 10. The energy required to break a chemical bond
 11. a mixture of metals or a mixture of a metal and another element
 15. Ion with multiple atoms
 17. What is the electrical attraction between a large number of anions and cations?
 19. Sharing of electrons among a lattice of positively charged ions
 20. Uneven distribution of charge
 21. A negative charged ion

22. large molecule, or macromolecule, composed of many repeated subunits
 23. Release of heat
 24. defined as the energy required to separate a mole of an ionic solid into gaseous ions.
 25. the empirical formula of any ionic or covalent network solid compound

Down

1. a pair of valence electrons that are not shared with another atom
 2. are the strongest type of covalent chemical bond
 5. One pair of electrons is shared between two atoms
 6. Molecule containing only two atoms
 7. a chemical property that describes the tendency of an atom to attract electrons towards itself

8. Ion with one atom
 9. Two pairs of electrons are shared between two atoms
 12. a chemical rule of thumb that reflects observation that atoms of main-group elements tend to combine in such a way that each atom has eight electrons in its valence shell,
 13. A positive charged ion
 14. Absorption of heat
 16. What is a mutual group of atoms held together by covalent bonds?
 18. What is the sharing of an electron pair between two atoms?