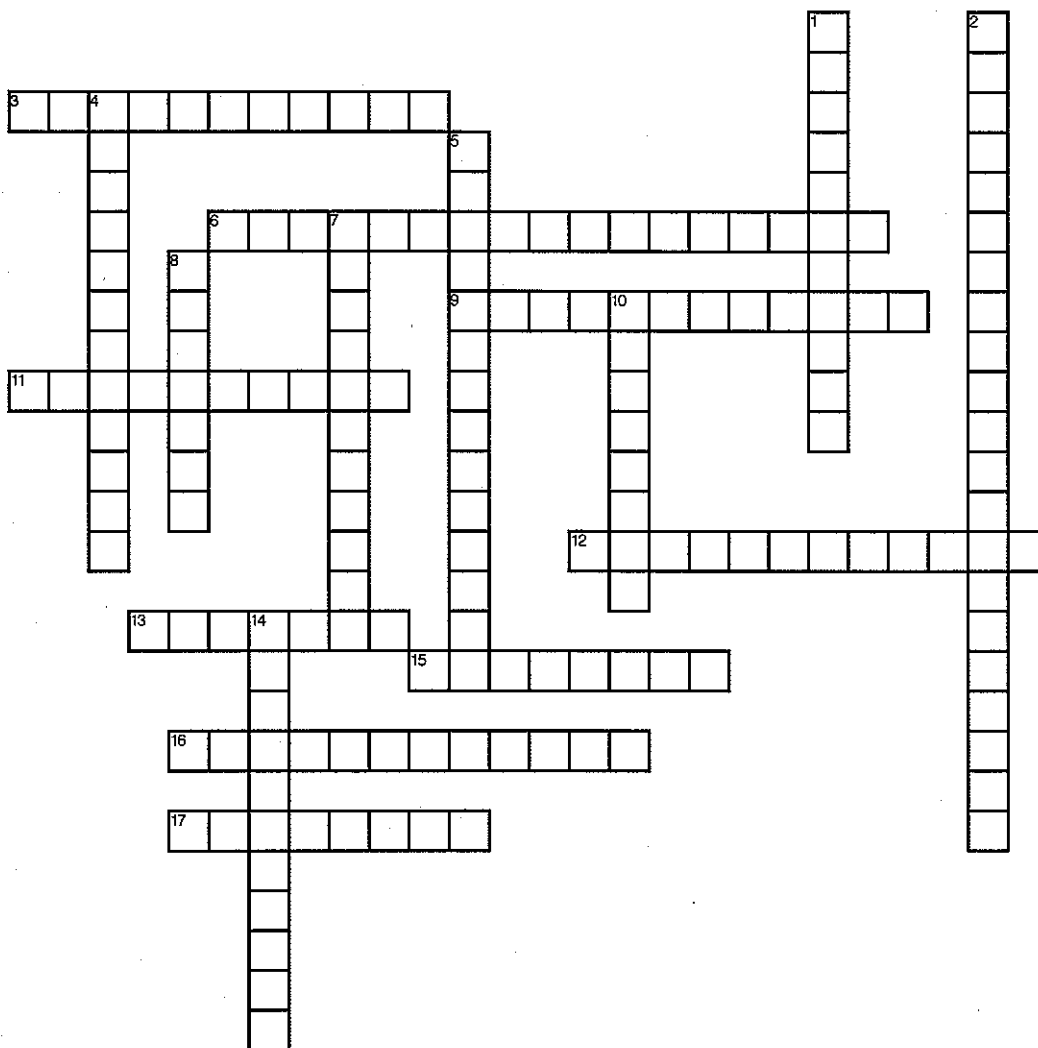


## Unit 8 Crossword 1, Modern\_Chemistry

Name \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Complete the puzzle. Use the clues to help you fill the boxes with the correct words.



### ACROSS

3. the process in which a solid changes directly into a gas (the term is sometimes also used for the reverse process)
6. a liquid that is cooled below its normal freezing point without solidifying
9. a graph of the relationship between the physical state of a substance and the temperature and pressure of the substance
11. the change of state from a gas directly to a solid
12. the change of state from a gas to a liquid
13. the change of state in which a solid becomes a liquid by adding heat or changing pressure
15. an imaginary gas whose particles are infinitely small and do not interact with each other
16. the process by which a liquid or solid changes to a gas

17. the change of state in which a liquid becomes a solid as heat is removed

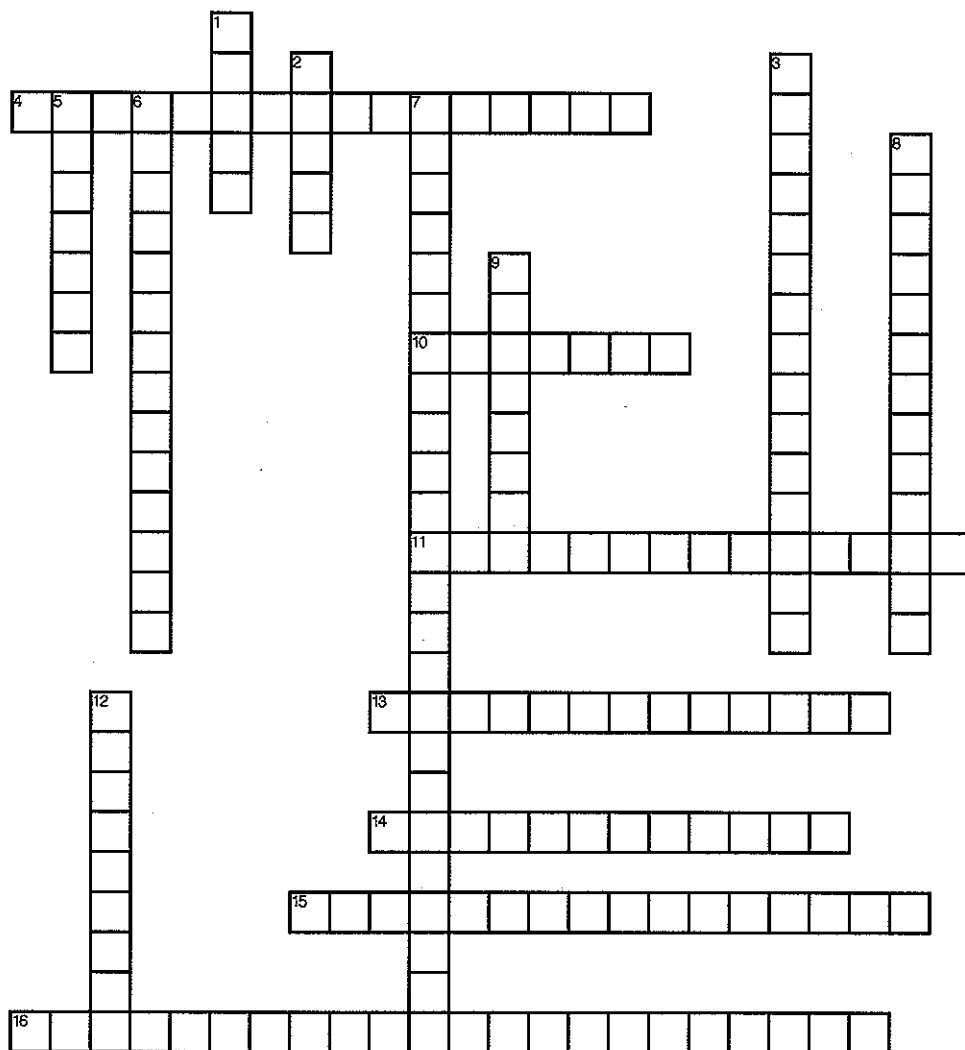
## DOWN

1. in chemistry, the state in which a chemical reaction and the reverse chemical reaction occur at the same rate such that the concentrations of reactants and products do not change
2. the amount of energy as heat required to change 1 mol of a substance from solid to liquid at constant temperature and pressure
4. the temperature and pressure at which a liquid and a gas are in equilibrium
5. a solid in which the particles are not arranged with periodicity or order
7. the change of a substance from a liquid to a gas
8. a solid whose atoms, ions, or molecules are arranged in a definite pattern
10. the passage of a gas under pressure through a tiny opening
14. the temperature and pressure conditions at which the solid, liquid, and gaseous phases of a substance coexist at equilibrium

## Unit 8 Crossword 2, Modern\_Chemistry

Name \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Complete the puzzle. Use the clues to help you fill the boxes with the correct words.



### ACROSS

4. a solid that consists of crystals
10. the conversion of a liquid to a vapor at a specific temperature and pressure; occurs when the vapor pressure of the liquid equals the atmospheric pressure
11. a liquid that evaporates readily or at a low temperature
13. the temperature at which a solid and liquid are in equilibrium at 1 atm pressure; the temperature at which a liquid substance freezes
14. the temperature and pressure at which a solid becomes a liquid
15. a collision between ideally elastic bodies in which the final and initial kinetic energies are the same
16. a theory that explains that the behavior of physical systems depends on the combined actions of the molecules constituting the system

## DOWN

1. in chemistry, one of the four states or conditions in which a substance can exist: solid, liquid, gas, or plasma; a part of matter that is uniform
2. a nonsolid state of matter in which the atoms or molecules are free to move past each other, as in a gas or liquid
3. the attraction of the surface of a liquid to the surface of a solid, which causes the liquid to rise or fall
5. a gas that does not behave completely like a hypothetical ideal gas because of the interactions between the gas molecules
6. the force that acts on the surface of a liquid and that tends to minimize the area of the surface
7. the vapor pressure of a system at equilibrium
8. the temperature and pressure at which the gas and liquid states of a substance become identical and form one phase
9. the smallest portion of a crystal lattice that shows the three-dimensional pattern of the entire lattice
12. the movement of particles from regions of higher density to regions of lower density