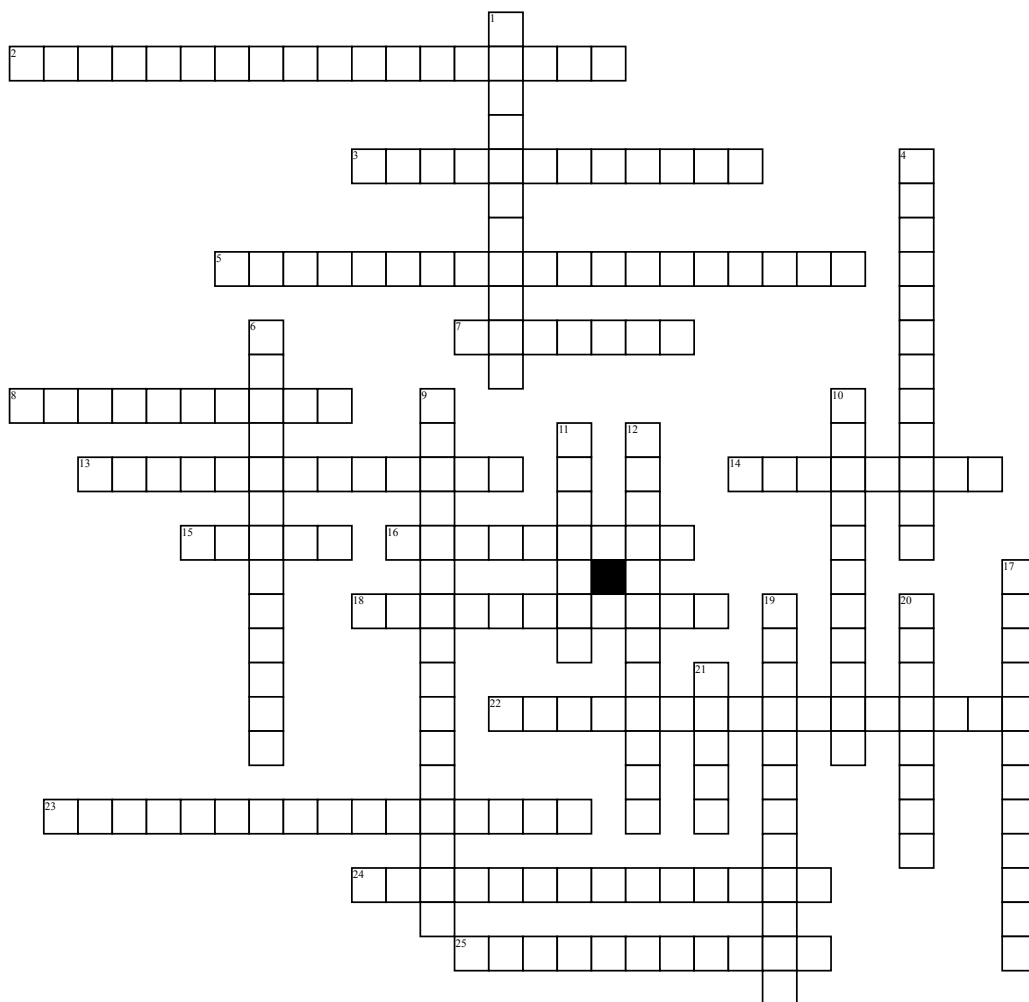


# The kinetic-molecular theory of matter



**Across**

- 2. below the freezing point without becoming a solid
- 3. temperature at which a liquid boils and turns into vapor
- 5. gas or vapor in its critical state
- 7.
- 8. the process of giving sworn evidence
- 13. liquid turns into a solid when cooled
- 14. giving off something such as a liquid, light, or smell
- 15. period or stage of time
- 16. spreading something wide
- 18. liqui turn into vapor
- 22. molecules in a crystalline material

- 23. glass, wax, salt, crystal
- 24. film of liquid caused by attraction of the particles in the surface layers
- 25. the temp and pressure at which the solid, liquids, and vapor phase of a pure substance can coexist in equilibrium

**Down**

- 1. ice turns into fog or steam without melting
- 4. water that collects as droplets on a cold surface
- 6. phase diagram which both liquid and gas phase of a substance have the same density

- 9. pressure of a gas or vapor in its critical state
- 10. a physical balance or opposing forces
- 11. crystalline solids
- 12. compound is a phase transition from the liquid phase to vapor
- 17. limits of stability of various phases in chemical systems
- 19. temperature at which a given solid will melt
- 20. smallest group of atoms
- 21. substance that has no fixed shape and yields easily to external pressure; like a gas

**Word Bank**

- |                      |                     |                   |                   |                |
|----------------------|---------------------|-------------------|-------------------|----------------|
| critical temperature | boiling point       | critical pressure | condensation      | triple point   |
| melting point        | crystal             | diffusion         | sublimation       | phase          |
| boiling              | supercooled liquids | freezing point    | evaporation       | critical point |
| fluid                | crystalline solid   | effusion          | crystal structure | deposition     |
| equilibrium          | unit cell           | vaporization      | surface tension   | phase diagram  |