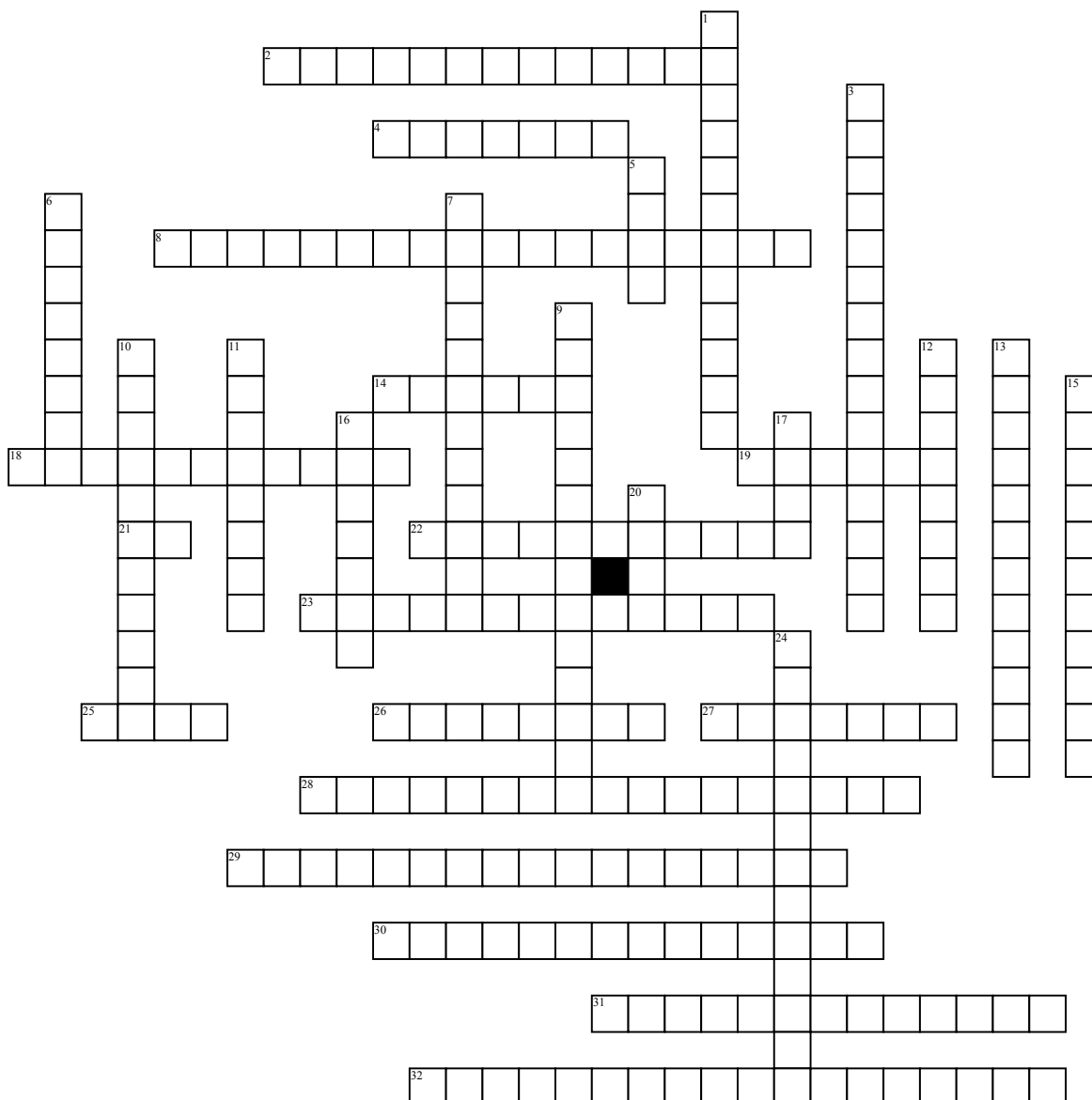


Name: _____

Chapter 3



Across

2. joule
4. the amount of heat energy required to raise the temperature of 1 g of water by 1 degree C
8. the quantity of heat a liquid must absorb for it to be converted into a gas
14. a substance that consists of acid and base forms in a solution and that minimizes changes in pH when extraneous acids or bases are added to the solution
18. a single proton with a charge of 1+
19. a substance that is dissolved in a solution
21. a measure of hydrogen ion concentration equal to $-\log[H^+]$ and ranging in value from 0-14
22. a measure of the intensity of heat in degrees
23. the energy of motion
25. a substance that increases the hydrogen ion concentration of a solution
26. a liquid that is a homogeneous mixture of two or more substances

27. the dissolving agent of a solution
28. kilocalorie
29. Any form of precipitation that is high in acid pollutants
30. the sphere of water molecules around each dissolved ion
31. the sum of the masses of all the atoms in a molecule
32. the property of a liquid whereby the surface becomes cooler during evaporation
Down
1. a water molecule that has lost a proton; OH^-
3. a solution in which water is the solvent
5. the total amount of kinetic energy due to molecular motion in a body of matter
6. a common measure of solute concentration
7. the amount of heat that must be absorbed or lost for 1 g of a substance to change its temperature by 1 degree C

9. a measure of how difficult it is to stretch or break the surface of a liquid
10. having an aversion to water
11. the attraction between different kinds of molecules
12. the binding together of like molecules
13. a temperature scale equal to 5/9 that measures the freezing point of water at 0 degrees C and the boiling point of water at 100 degrees C
15. having an affinity for water
16. a mixture made up of a liquid and particles that remain suspended in that liquid
17. the number of grams of a substance that equals its molecular weight in daltons and contains Avogadro's number of molecules
20. a substance that reduces the hydrogen ion concentration of a solution
24. a molecule with opposite charges on opposite sides