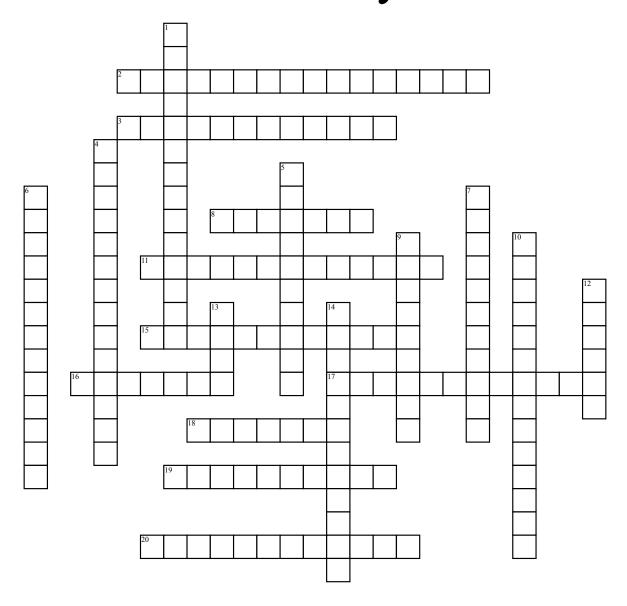
Chemistry 4



Across

- **2.** An expression representing a chemical reaction.
- **3.** The temperature at which the vapor pressure of a liquid is just equal to the external pressure on the liquid.
- **8.** A group of voltaic cells that are connected to one another.
- 11. Any solution in which the hydroxide-ion concentration is greater than the hydrogen-ion concentration.
- **15.** An electron resulting from the breaking apart of neutrons in an atom.
- **16.** The quantity of heat needed to raise the temperature of 1g of pure water 1^0C
- **17.** The temperature scale on which the freezing point of water is 0^0C and the boiling point is 100^0C

- **18.** An electron at which reduction occurs.
- **19.** The reactions in living cells in which substances are broken down and energy is produced.
- **20.** The name given to monomers and polymers of aldehydes and ketones that have numerous hydroxyl groups.

Down

- **1.** A change that produces matter with a different composition than the original matter.
- **4.** An organic acid containing a carboxyl group.
- **5.** A stream of electrons produced at the negative electrode (cathode) of a tube containing a gas at low pressure.

- **6.** A functional group consisting of a carbonyl group attached to a hydroxyl group.
- 7. The volume of a fixed mass of gas is directly proportional to its Kelvin temperature if the pressure is kept constant.
- **9.** For a given mass of gas at constant temperature.
- 10. A compound composed of two elements.
- **12.** A solution in which the pH remains relatively constant when small amounts of acid or base are added.
- **13.** A compound that produces hydroxide ions in solution
- **14.** The area of chemistry that focuses on processes that take place in organisms.