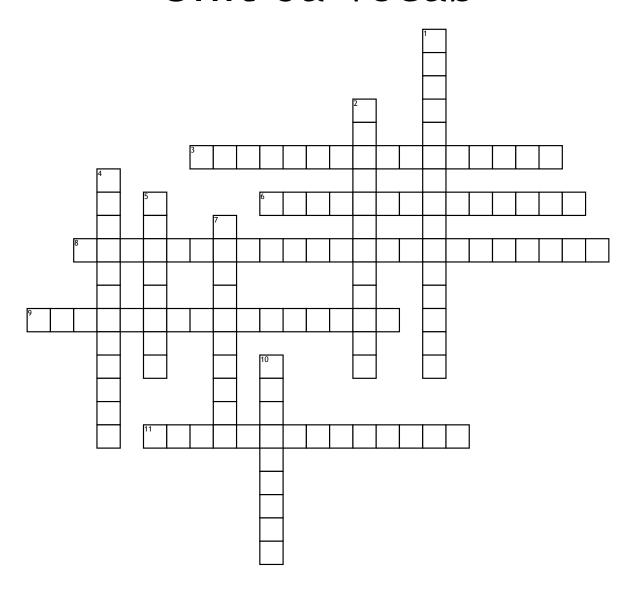
Unit 6a Vocab



Across

substances; irreversible.

participate in forming chemical bonds with other atoms

6. _____ occur when a substance combines
with another to form a new substance, called synthesis or,
alternatively, decomposes into two or more different

3. An electron in an outer shell of an atom that can

- **8.** The ___ of ___ of ___ states that for any system closed to all transfers of matter and energy, the mass of the system must remain constant over time.
- **9.** A ______ is the symbolic representation of a chemical reaction in the form of symbols and formulas.
- 11. ______ occur when objects or substances undergo a change that changes the physical form of a composition but not the chemical composition.

Down

- 1. A way of expressing information about the proportions of atoms that constitute a particular chemical compound, using a single line of chemical element symbols, numbers, and sometimes also other symbols, such as parentheses, dashes, brackets, commas and plus (+) and minus (-) signs.
- **2.** A ______ is a lasting attraction between atoms that enables the formation of chemical compounds.
- **4.** The _____ are a group of elements in the periodic table. They are all in the first column of the periodic table. They are extremely reactive.
- 5. The result of a chemical reaction.
- 7. The _____ make a group of chemical elements with similar properties. Under standard conditions, they are all odorless, colorless, monatomic gases with very low chemical reactivity.
- **10.** A substance that takes part in and undergoes change during a reaction.