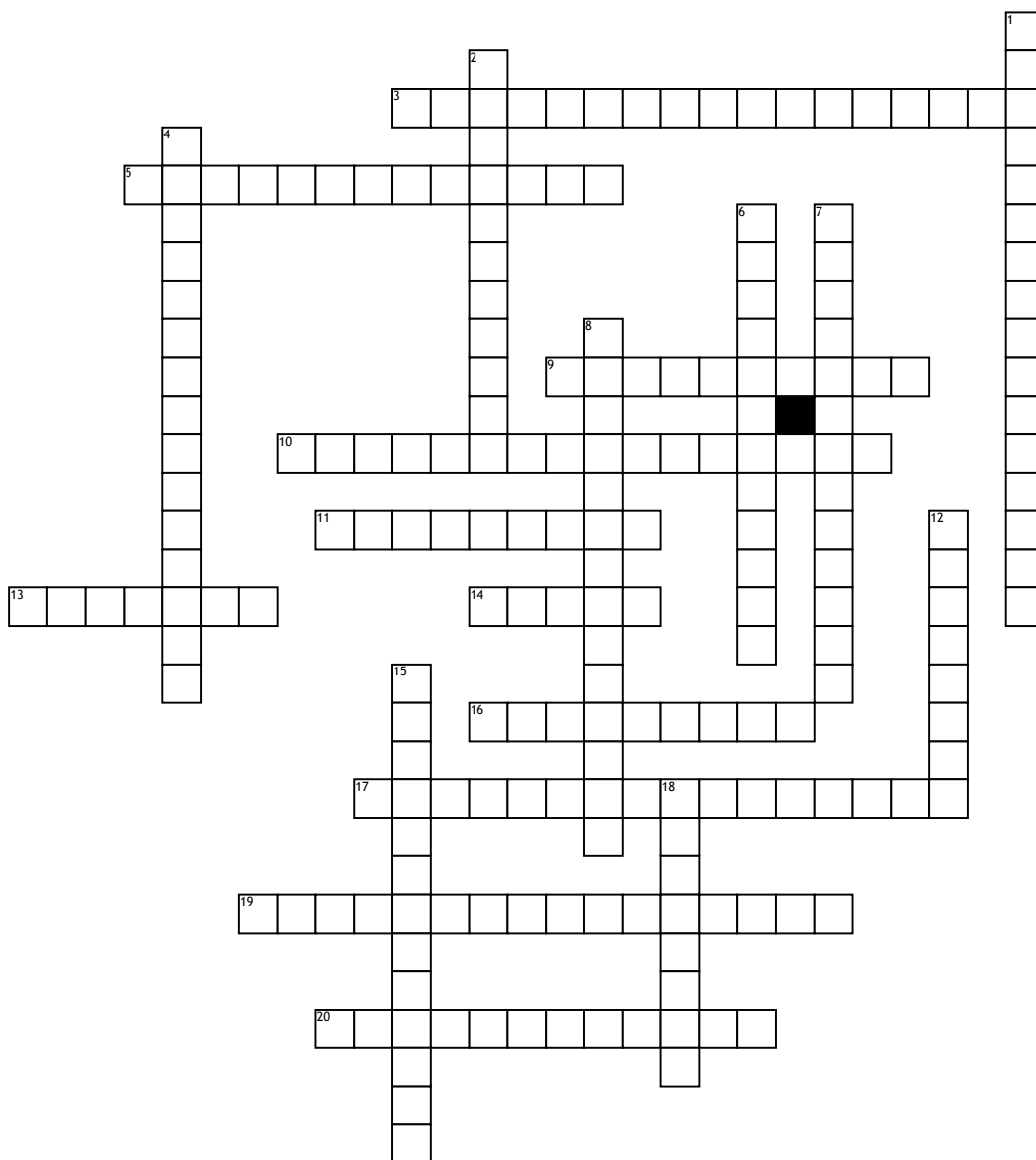


Name: \_\_\_\_\_

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# Stoichiometry and Chemical Reactions



## Across

3. One element replaces another element in a compound.  
5. What holds individual atoms of compounds together.  
9. A chemical reaction where heat is released to its surroundings.  
10. A representation of a chemical reaction that uses symbols to represent the relationship between the reactants and the products.  
11. The mass of one mole of a substance.  
13. A chemical substance formed as a result of a chemical reaction.  
14. A unit of amount, the amount of a substance containing  $6.02 \times 10^{23}$  entities.

16. Two or more substances combine to form a new compound.

17. A reactant in a chemical reaction that determines the amount of product that is formed.

19. A process in which one or more substances are changed into others.

20. Used in a chemical equation to determine mole ratios.

## Down

1. The smallest amount of energy needed to start a chemical reaction.  
2. A chemical reaction that needs heat.  
4. A combination of chemical symbols and numbers to represent a substance.  
6. The ratio of the actual yield to the theoretical yield shown as a percent.

7. A compound decomposes into two or more simpler substances.

8. The reactant in a chemical equation with a greater amount than necessary to react completely with the limiting reactant.

12. A substance that changes the rate of a chemical reaction without being used up or changed very much.

15. The quantitative relationship between two or more substances especially in processes involving chemical or physical change.

18. A chemical substance that is present at the beginning of a chemical reaction.