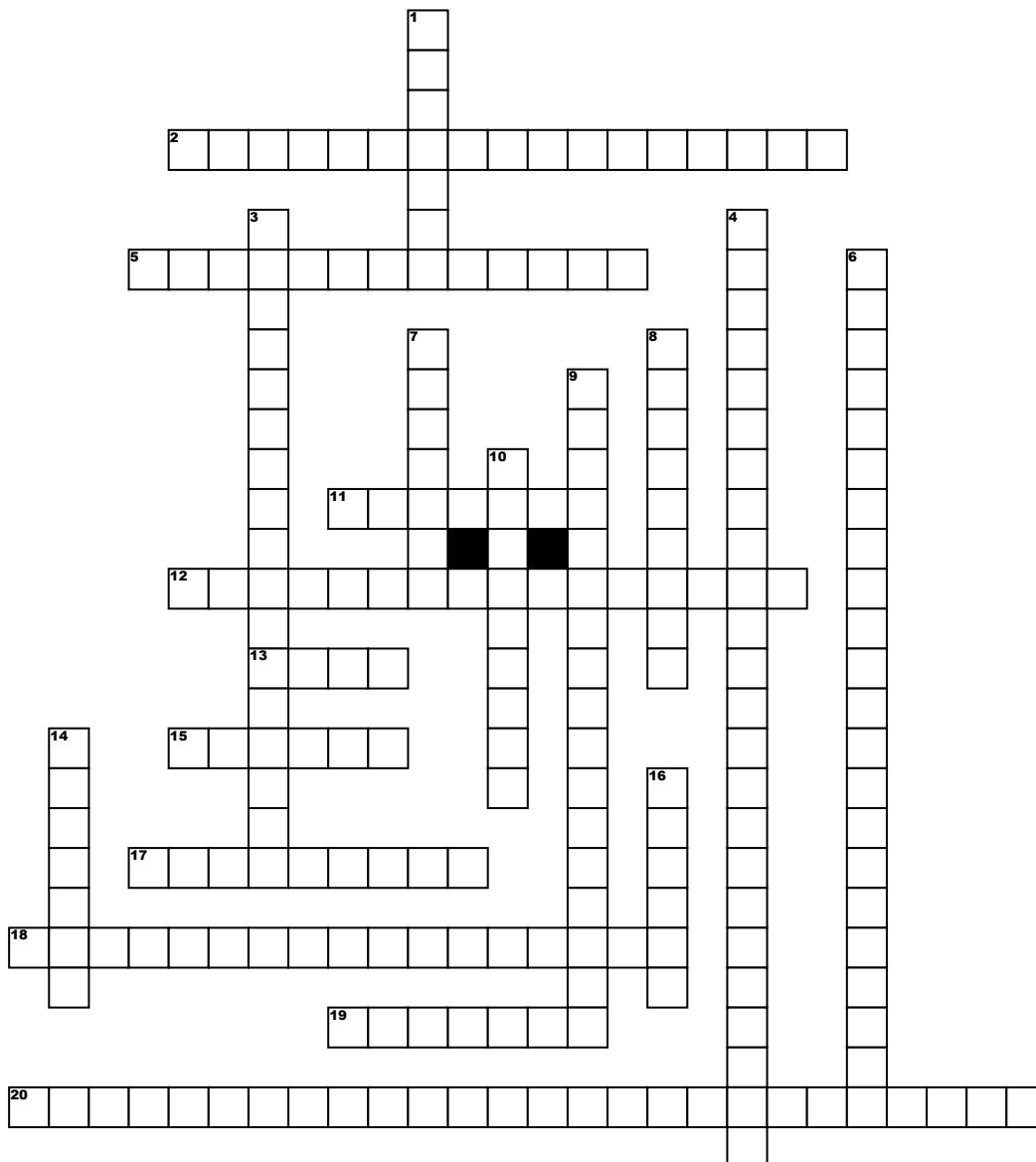


# Chemistry



**Across**

2. What type of reaction is:  $AB + C > CB + A$ ?

5. What type of reaction is:  $AB > A + B$ ?

11. What is mole ratio of  $HCl/H_2$  of  $Zn + 2HCl > ZnCl_2 + H_2$ ?

12. Balanced Equation

13. A compound with a molecular weight of 42. The empirical formula is  $CH_2$ . What is the molecular formula?

15. How many moles of  $KF$  are produced from 36 grams of  $BaF_2$ ?

17. What type of reaction is:  $A + B > AB$ ?

18. Formula giving the proportions of the elements present in a compound but not the actual numbers or arrangement of atoms.

19. How many moles of  $HCl$  are needed to produce 3.1 moles of  $H_2$ ?

20. Balance this equation:  $BaF_2 + 2K_3PO_4 > Ba_3(PO_4)_2 + 6KF$

**Down**

1. How many grams of  $K_3PO_4$  are needed to produce 62 grams of  $KF$ ?

3. What type of reaction is:  $AB + CD > AD + CB$ ?

4. Balance this equation:  $HNO_3 + Na_2SO_4 > NaNO_3 + H_2SO_4$

6. Calcium carbide reacts with water to form calcium hydroxide and acetylene gas. What is the balanced equation?

7. In Reaction:  $Fe_2O_3 + 3CO > 2Fe + 3CO_2$ , what is the total number of moles of  $CO$  used to produce 112 grams of iron?

8. What is mole ratio of  $BaF_2/K_3PO_4$  of  $3BaF_2 + 2K_3PO_4 > Ba_3(PO_4)_2 + 6KF$ ?

9. Formula giving the number of atoms of each of the elements present in one molecule of a specific compound.

10. Comparison of 2 terms substances from the reaction.

14.  $Cu + 2AgNO_3 > 2Ag + Cu(NO_3)_2$ ; Copper metal reacts with silver nitrate to form silver and copper nitrate. How many grams of copper are required to form 250g of silver?

16.  $Zn + 2HCl > ZnCl_2 + H_2$ ; How many moles of  $HCl$  would be required to produce a total of 2 moles of  $H_2$ ?