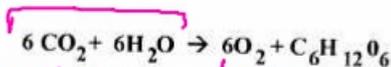


Name: _____ Period: _____ Date: _____
HOMEWORK: CHEMICAL REACTIONS

Match the following:

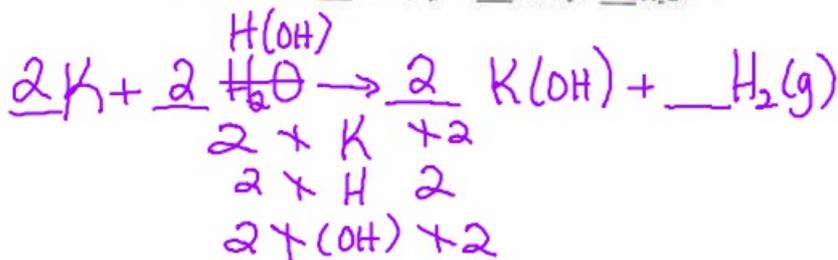
- | | |
|-------------------------------|---|
| <u>D</u> 1. Chemical reaction | a. symbol for heat added |
| <u>B</u> 2. Reactants | b. substance that enters a chemical reaction |
| <u>G</u> 3. Product | c. part of atom involved in chemical bonds |
| <u>C</u> 4. Valence electrons | d. process in which a new substance is formed |
| <u>F</u> 5. Activation energy | e. symbol for yield |
| <u>E</u> 6. \rightarrow | f. needed to initiate a chem. Rxn. |
| <u>H</u> 7. Coefficient | g. substance produced in a chem. Rxn. |
| <u>A</u> 8. Δ | h. number used to express amount of substance in a reaction |



9. List the reactants: $\text{CO}_2 + \text{H}_2\text{O}$
 10. List the products: $\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6$
 11. What is the coefficient for water? 6 oxygen gas? 6 carbon dioxide? 6
 12. How many oxygen atoms enter the reaction? 18 How many are produced? 18

Balance the following equations:

13. 2 $\text{Al}(\text{NO}_3)_3 + \underline{3} \text{FeCl}_2 \rightarrow \underline{3} \text{Fe}(\text{NO}_3)_2 + \underline{2} \text{AlCl}_3$
 14. 1 $\text{BaCl}_2 + \underline{2} \text{NaOH} \rightarrow \underline{2} \text{NaCl} + \underline{1} \text{Ba}(\text{OH})_2$
 15. 1 $\text{CH}_4 \rightarrow \underline{1} \text{C} + \underline{2} \text{H}_2$
 16. 2 $\text{O}_2 + \underline{1} \text{N}_2 \rightarrow \underline{1} \text{N}_2\text{O}_4$
 17. 2 $\text{NaI} + \underline{1} \text{Pb}(\text{NO}_3)_2 \rightarrow \underline{2} \text{Na}(\text{NO}_3) + \underline{1} \text{PbI}_2$
 18. 1 $\text{Cu} + \underline{2} \text{AgNO}_3 \rightarrow \underline{1} \text{Cu}(\text{NO}_3)_2 + \underline{2} \text{Ag}$
 19. 2 $\text{K} + \underline{2} \text{H}_2\text{O} \rightarrow \underline{2} \text{KOH} + \underline{1} \text{H}_2(\text{g})$
 20. 1 $\text{MnO}_2 + \underline{4} \text{HCl}(\text{aq}) \rightarrow \underline{1} \text{MnCl}_2 + \underline{2} \text{Cl}_2(\text{g}) + \underline{2} \text{H}_2\text{O}$
 21. 1 $\text{Cl}_2 + \underline{2} \text{LiI} \rightarrow \underline{2} \text{LiCl} + \underline{1} \text{I}_2(\text{g})$
 22. 1 $\text{Ca}(\text{OH})_2 + \underline{2} \text{HCl}(\text{aq}) \rightarrow \underline{1} \text{CaCl}_2 + \underline{2} \text{H}_2\text{O}$



Understanding reaction terminology

element or a diatomic molecule — it is considered "single"

molecule or compound — both referred to as "double" or compound

