

Review Sheet: Chapter 2.A

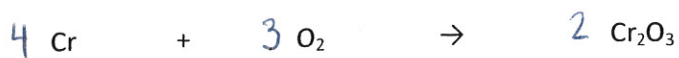
You should know *definitions and usage* of the following words:

Law of Conservation of Matter	reactants	products
balanced equation	subscript	coefficient
resources	renewable resources	nonrenewable resources
waste	recycling	alloy

1. The total number of atoms of hydrogen in the chemical formula,  $\text{Ca}(\text{OH})_2$ , is 2.
2. In chemical reactions matter is neither created nor destroyed is a statement of Law of Conservation.
3. According to this law, the number of atoms after a reaction takes place is equal to the numbers of atoms present before a reaction takes place.
4. How quickly are nonrenewable resources are produced by the Earth? they are never.
5. The coefficient in the following portion of a chemical equation,  $4 \text{Ni}(\text{NO}_3)_2$ , is 4.
6. In a chemical formula, the coefficient tells you # of molecules of compound.
7. What is conserved in a balanced chemical equation? mass / atoms.
8. How many atoms of iron can be found in  $\text{Fe}_2\text{O}_3$ ? 2.
9. In the following portion of a chemical equation,  $3 \text{CH}_4$ , the subscript is 4.
10. In a chemical formula the subscript tells you # of atoms.
11. The starting materials in a reaction are called the reactants.
12. In order for a chemical equation to obey the law of conservation of matter it must be balanced.

13. The substances formed in a chemical reaction are called products.

Answer questions #14-16 based on the following equation:



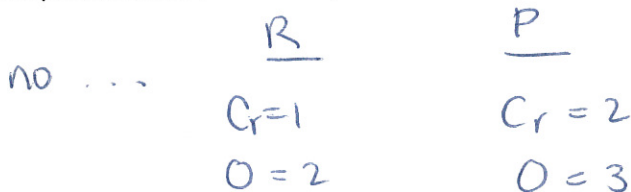
14. What is/are the reactant(s) in this equation?



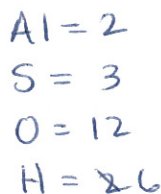
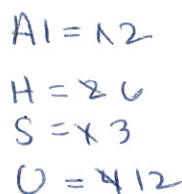
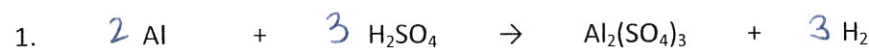
15. What is/are the product(s) in this equation?



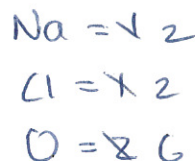
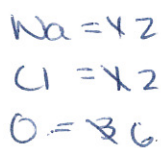
16. Is the equation balanced? If not, balance the equation.



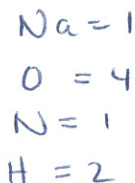
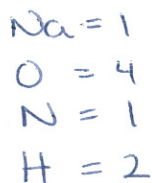
Balance the following equations:



9

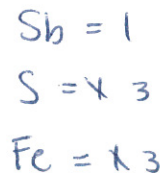
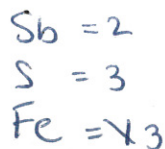


7



balanced

4



9



H = 24  
O = 2

H = ~~2~~4  
O = ~~1~~2

5



C = ~~2~~4  
H = ~~2~~12  
O = ~~2~~14

C = ~~1~~~~2~~~~2~~4  
H = ~~2~~~~2~~12  
O = ~~2~~5~~7~~14

19



Al = 3  
O = 3  
C = ~~1~~3  
Cl = ~~2~~6

Al = ~~1~~2  
O = ~~1~~3  
C = ~~1~~3  
Cl = ~~2~~6

12

65