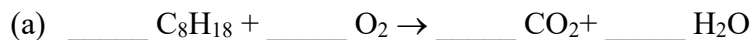


Chemistry Review #3  
Balancing, Types of Reactions, Acids and Bases

1. Balance and identify the type of each of the following reactions.



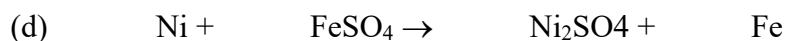
Reaction type: \_\_\_\_\_



Reaction type: \_\_\_\_\_



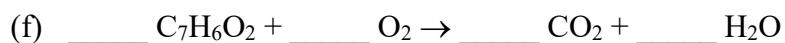
Reaction type: \_\_\_\_\_



Reaction type: \_\_\_\_\_



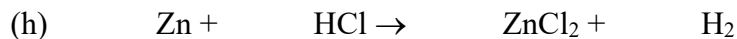
Reaction type: \_\_\_\_\_



Reaction type: \_\_\_\_\_



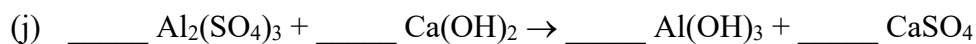
Reaction type: \_\_\_\_\_



Reaction type: \_\_\_\_\_



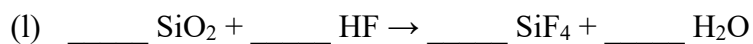
Reaction type: \_\_\_\_\_



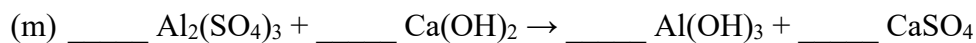
Reaction type: \_\_\_\_\_



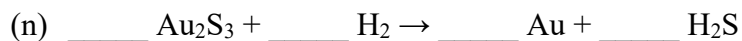
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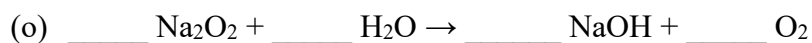
Reaction type:  $\underline{\hspace{10cm}}$



Reaction type:  $\underline{\hspace{10cm}}$



Reaction type:  $\underline{\hspace{10cm}}$



Reaction type:  $\underline{\hspace{10cm}}$

2. List the properties of acids and bases.

properties of acids	properties of bases

3. What element do all acids contain?

4. Acids have a pH of \_\_\_\_\_.
5. Bases have a pH of \_\_\_\_\_.
6. Explain how you can use litmus paper to determine if an unknown liquid is an acid or a base.
7. Explain what is meant by a neutralization reaction.
8. Indicate if each of the following is an acid or a base.

Substance	Red Litmus	Blue Litmus	pH	Acid or Base
coffee	red	red	5	
milk	red	red		
oven cleaner			13	
hand soap	blue	blue		