

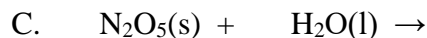
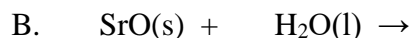
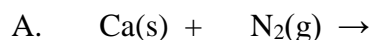
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## Workshop #4: Reactions

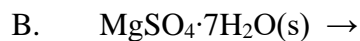
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Predict products and balance the following reactions (write total-ionic and net-ionic where requested). If no reaction takes place, write NR for no reaction. Be sure to include phases.

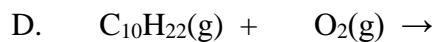
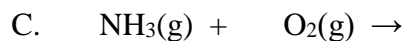
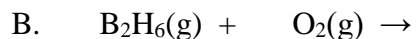
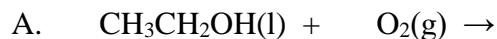
1. Synthesis (Combination or Composition) Reactions:  $A + B \rightarrow AB$



2. Decomposition Reactions:  $AB \rightarrow A + B$



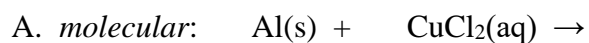
3. Combustion Reactions: *nonmetals* +  $\text{O}_2 \rightarrow$  *nonmetal oxides*:  $\text{H}_2\text{O}$ ,  $\text{CO}_2$ ,  $\text{SO}_2$ ,  $\text{NO}_2$



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

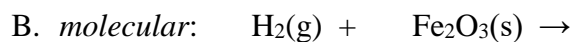
Section: \_\_\_\_\_

4. Single Replacement (Displacement) Reactions:  $C + AB \rightarrow AC + B$  OR  $CB + A$



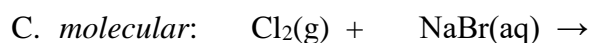
*total-ionic:*

*net-ionic:*



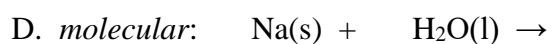
*total-ionic:*

*net-ionic:*



*total-ionic:*

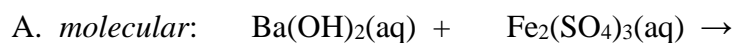
*net-ionic:*



*total-ionic:*

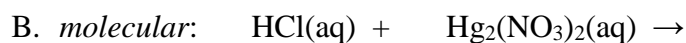
*net-ionic:*

5. Double Replacement (Displacement) Reactions:  $AB + CD \rightarrow AD + CB$



*total-ionic:*

*net-ionic:*

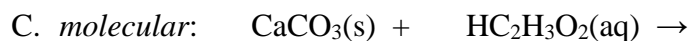


*total-ionic:*

*net-ionic:*

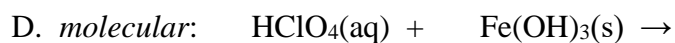
Name: \_\_\_\_\_

Section: \_\_\_\_\_



*total-ionic:*

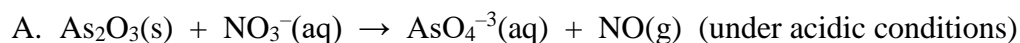
*net-ionic:*



*total-ionic:*

*net-ionic:*

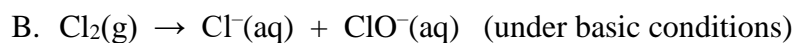
6. Redox (Oxidation-Reduction) Reactions:



*Oxidation half reaction:*

*Reduction half reaction:*

*Balanced reaction:*



*Oxidation half reaction:*

*Reduction half reaction:*

*Balanced reaction:*