

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

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

Class : \_\_\_\_\_

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

Period : \_\_\_\_\_

Assignment: Assignment Week 1

**Due:** **Friday, 5/8**

## Describing Chemical Reactions

### Background:

Balancing chemical reaction is the first skill to master.

### General Instructions:

Please do the activities for each day as indicated. You will work the problems on separate sheets of paper as necessary that you will attach to the completed packet that you submit.

### Submitted Work:

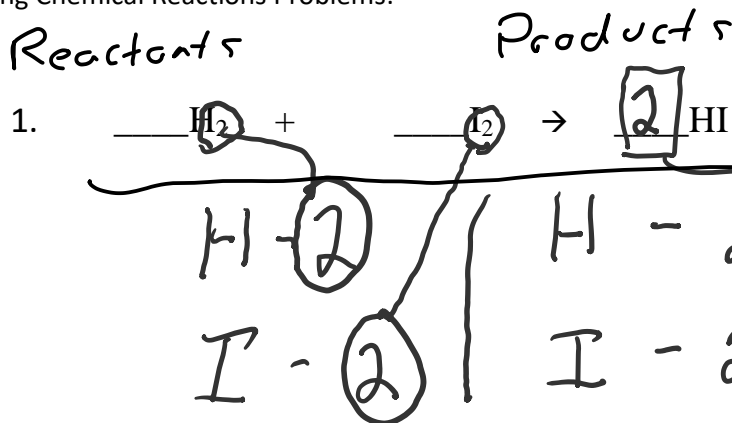
- 1) Reading notes from section 11.1
- 2) Completed practice problems and section assignment from Monday
- 3) Completed problems from Tuesday through Friday

### Questions:

- 1) Please send email as you have questions and/or attend virtual office hours.

Date	Activity
Monday (4/20)	Read Section 11.1 Take reading notes Do practice problems 1,2,3,4,5,6 Do section assessment 11.1 (pg 329) problems 10,11,12.
Tuesday (4/21)	Do problems 1-5 (below) (note that #1 is already completed for you as an example – <b><i>you are to use that setup for all of your problems</i></b> )
Wednesday (4/22)	Problems 6-10
Thursday (4/23)	Problems 11-15
Friday (4/24)	Problems 16-20

### Balancing Chemical Reactions Problems:



No need to change the coefficient on the left side so it defaults to 1.

On the right side the number of H and I atoms in HI is just 1 – and that can't be changed. Set the coefficient to 2.

2.  $\text{Al} + \text{Fe}_2\text{O}_3 \rightarrow \text{Fe} + \text{Al}_2\text{O}_3$
3.  $\text{Fe}_2\text{S}_3 + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3 + \text{SO}_2$
4.  $\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$
5.  $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
6.  $\text{Al} + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2$
7.  $\text{Mg}_3\text{N}_2 + \text{H}_2\text{O} \rightarrow \text{MgO} + \text{NH}_3$
8.  $\text{N}_2\text{H}_4 + \text{O}_2 \rightarrow \text{NO}_2 + \text{H}_2\text{O}$
9.  $\text{Ca} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2 + \text{H}_2$
10.  $\text{SO}_2 + \text{O}_2 \rightarrow \text{SO}_3$
11.  $\text{K} + \text{H}_2\text{O} \rightarrow \text{KOH} + \text{H}_2$
12.  $\text{MgO} + \text{HNO}_3 \rightarrow \text{Mg}(\text{NO}_3)_2 + \text{H}_2\text{O}$
13.  $\text{HCl} + \text{Al}(\text{OH})_3 \rightarrow \text{AlCl}_3 + \text{H}_2\text{O}$
14.  $\text{H}_2\text{SO}_4 + \text{Al}(\text{OH})_3 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2\text{O}$
15.  $\text{CCl}_4 + \text{O}_2 \rightarrow \text{COCl}_2 + \text{Cl}_2$
16.  $\text{PbO}_2 + \text{Pb} + \text{H}_2\text{SO}_4 \rightarrow \text{PbSO}_4 + \text{H}_2\text{O}$
17.  $\text{C}_5\text{H}_{12} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
18.  $\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
19.  $\text{C}_4\text{H}_{10} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
20.  $\text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$