

## CHEMISTRY WORKSHEET

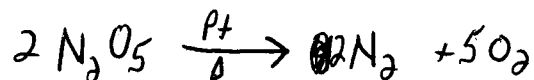
## Writing Chemical Equations

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

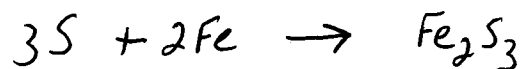
KEY

Write a balanced equation for each of the following:

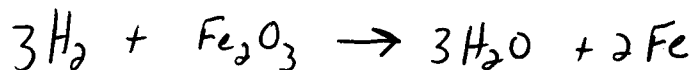
1. Dinitrogen pentoxide gas in the presence of a platinum catalyst and high enough temperature forms nitrogen gas and oxygen gas.



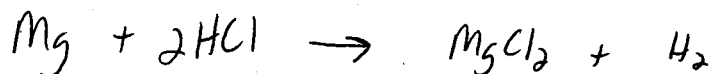
2. Sulfur solid reacts with iron solid to form solid iron(III) sulfide.



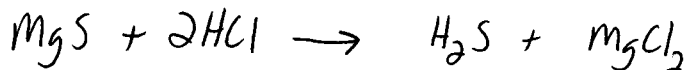
3. Hydrogen gas and iron(III) oxide powder react to form liquid water and solid iron powder.



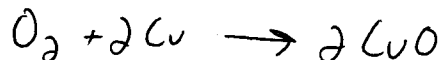
4. Magnesium metal reacts with hydrochloric acid to form magnesium chloride solution and hydrogen gas.



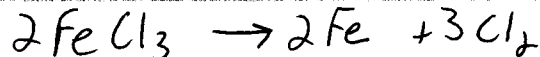
5. Magnesium sulfide solid and hydrochloric acid react to form hydrogen sulfide gas and magnesium chloride solution.



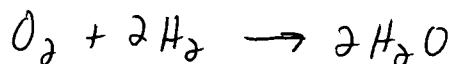
6. Oxygen gas reacts with solid copper metal to form copper(II) oxide solid.



7. Voltage is applied to two electrodes in a solution of iron(III) chloride and a yellow-green gas bubbles form on one electrode and metallic deposits form on the other electrode.



8. Oxygen gas reacts with hydrogen gas to form liquid water.



9. Hydrogen sulfide gas is bubbled through a sodium hydroxide solution to produce sodium sulfide solution and liquid water.



10. When strongly heated, magnesium sulfide formed a yellow crystalline deposit on the walls of a sealed reaction vessel. Metallic deposits were found on the bottom of the container.

