Name: Period: Seat #:

All work must be hand-written; nothing that is typed will be accepted for credit. This activity is worth 100 points.

General Vocabulary Review

As you surf the suggested sites and *look for other sites* to help you make note of the vocabulary terms that you encounter. You may already know some of these definitions, if not, look them up and write the definitions here!

| Term | Definition |
|------------------|------------|
| Alkali Metal | |
| Element | |
| Reactive | |
| Valence Electron | |
| Alkaline Earth | |
| Metal | |
| Mineral | |
| Compound | |
| Alloy | |
| Non-Metal | |
| Conductor | |
| Corrosion | |
| Halogens | |

Alkali Metals

Find out how the following elements are used in fireworks. Explain the role of each element.

| AI | |
|----|--|
| Ва | |
| С | |
| Ca | |
| CI | |
| Cu | |
| Fe | |
| К | |
| Li | |
| Mg | |
| Na | |
| 0 | |
| Ρ | |
| S | |
| Sb | |
| Sr | |
| | |
| Ti | |

- Chemistry of firework colors
 <u>http://chemistry.about.com/od/fireworkspyrotechnics/a/fireworkcolors.htm</u>
- Chemistry of Fireworks
 <u>http://www.fireworks.com/safety/chemistry-fireworks.asp</u>
- Create Your Own Fireworks <u>http://www.fireworks.com/interactive/fireworks_show/default.asp</u>
 Starshell Glossary (Shapes of Fireworks)
- http://www.firework.co.nz/fireworks/starshell_glossary.htm
- Pyrotechnics: It's Elemental <u>http://www.pbs.org/wgbh/nova/kaboom/elemental/</u>

Alkaline Earth Metals

Use these websites to find the information to complete the following chart.

KidsHealth.Org

http://kidshealth.org/teen/misc/mineral_chart.html

HealthAlternatives

http://www.healthalternatives2000.com/minchart.htm

http://www.webelements.com

| Mineral Chart | | | | | | |
|-----------------|---|--|--------------------|--|--|--|
| Mineral Name | Importance to Health | Good Sources | Type of Element | | | |
| Calcium | Helps form healthy bones and teeth, helps blood clotting, regulates heartbeat | nd Dairy products (milk, yogurt, cheese), green leafy vegetables (spinach, collard greens) | | | | |
| Chlorine | | | | | | |
| Copper | | | | | | |
| Fluorine | | | | | | |
| lodine | | | | | | |
| Iron | | | | | | |
| Magnesium | | | | | | |
| Phosphorous | | | | | | |
| Potassium | | | | | | |
| Sodium | | | | | | |
| Zinc | | | | | | |

Transition Metals

Use the following websites to find the information you will need to complete the data table.

http://www.csudh.edu/oliver/chemdata/alloys.htm http://www.efunda.com/materials/alloys/alloy_home/alloys.cfm http://www.webelements.com

| Name of alloy | Composition (elements) | Properties | Common uses |
|-----------------|------------------------|------------|-------------|
| Brass | | | |
| Bronze | | | |
| 14-karat gold | | | |
| Pewter | | | |
| Solder | | | |
| Stainless steel | | | |
| Sterling silver | | | |
| Wrought iron | | | |