



Name(s) \_\_\_\_\_

Visit the Earth Science section of the Kid Zone at The Science Spot (<http://sciencespot.net/>) to find the answers to these questions!

**Site: Mineral Uses**

1. Based on current consumption, it is estimated that you - and every other person in the United States - will use more than a \_\_\_\_\_ pounds of rocks, minerals and metals during your lifetime. How many pounds of the following will you use?

\_\_\_\_\_ Lead      \_\_\_\_\_ Zinc      \_\_\_\_\_ Copper      \_\_\_\_\_ Aluminum  
\_\_\_\_\_ Iron      \_\_\_\_\_ Clays      \_\_\_\_\_ Salt      \_\_\_\_\_ Stone, sand, & gravel

2. Match each resource to its best use(s).

- |                 |   |
|-----------------|---|
| _____ Aluminum  | A. Used to make "copper" pennies, brass, and nails  |
| _____ Antimony  | B. Used to make fertilizer, paper, film, matches, tires, and drugs  |
| _____ Beryllium | C. Used to make phosphate fertilizer and is found in soft drinks  |
| _____ Coal      | D. Most abundant element used to make containers and deodorants   |
| _____ Copper    | E. Found in metal alloys for air crafts as well as emeralds   |
| _____ Flint     | F. Used to produce 56% of electricity in the US   |
| _____ Fluorite  | G. Used to make electrical wires, brass, bronze, coins, plumbing and jewelry  |
| _____ Galena    | H. Used to make arrowheads, spear points, and knives; may be used to start a fire                                       |
| _____ Gold      | I. Primary source of lead, used to make batteries, fishing weights, and the lead shields to protect us during X-rays    |
| _____ Gypsum    | J. Primary use is for "sheet rock" or wallboard   |
| _____ Halite    | K. Native element used to make medicine, glass, and fireworks   |
| _____ Hematite  | L. Used to make fluoride toothpaste, pottery, and hydrofluoric acid   |
| _____ Limestone | M. Used in dentistry, medicine, jewelry, art, and computers; very malleable (can be made to be thinner than human hair) |
| _____ Lithium   | N. Primary ore of iron used to produce iron for steel for automobiles, tools, and bridges                               |
| _____ Mica      | O. Composed of calcium carbonate and is used in the construction of homes, sidewalks, bridges, and skyscrapers          |
| _____ Phosphate | P. May be ground up to add "sparkle" to paints and cosmetics  |
| _____ Silica    | Q. Used in the manufacture of computer chips, glass, ceramics, abrasives, and sweeteners                                |
| _____ Silver    | R. Used as food seasoning, water softener, and de-icer  |
| _____ Sulfur    | S. Compounds are used in ceramics and glass; may also be used for rocket propellants, batteries, and medicine           |
| _____ Zinc      | T. Used in photography, chemistry, jewelry, coins, mirrors, and silverware  |

**Site: Fireworks**

1. How many tons of fireworks are used each year?
2. What minerals are used to make the following colors or special effects?

Bright Greens -

Yellows -

Silvery White -

Orange -

Deep Reds -

Gold Sparks -

Lavender -

Bright flashes -

Blues -

Silvery-white flashes -

**Site: Mineral Groups**

1. What are the birthstone(s) for each month?

January: \_\_\_\_\_ or \_\_\_\_\_

February: \_\_\_\_\_ or \_\_\_\_\_

March: \_\_\_\_\_ or \_\_\_\_\_

April: \_\_\_\_\_ or \_\_\_\_\_

May: \_\_\_\_\_ or \_\_\_\_\_

June: \_\_\_\_\_ or \_\_\_\_\_ or \_\_\_\_\_

July: \_\_\_\_\_ or \_\_\_\_\_

August: \_\_\_\_\_ or \_\_\_\_\_

September: \_\_\_\_\_ or \_\_\_\_\_

October: \_\_\_\_\_ or \_\_\_\_\_

November: \_\_\_\_\_ or \_\_\_\_\_

December: \_\_\_\_\_ or \_\_\_\_\_

2. Name three minerals that "glow" under ultraviolet light. What is the glow called?
3. What is a gemstone? Can all minerals be gemstones? Explain.
4. What is a mineraloid? Give 3 examples.