## Chapter 5 - SAMPLE TEST

(Record your answers on this sheet of paper.)

1. Mosley arranged the elements based on $\qquad$ .
2. The most reactive group of metals is called $\qquad$ .
3. Which element is responsible for the dark green color of an emerald?
4. What element is an essential mineral in your diet and in flash bulbs and provides the bright white light of fireworks?
5. Which metal has such a low melting point it will melt in your hand?
6. What element is a self-protecting metal that is used to galvanize other metals to keep them from corroding, such as in nails and buckets?
7. What element is often referred to as "yellow cake"?
8. Which metal has the highest melting point, so it is often used in light bulbs and to make drill bits?
9. Which element is used to make very strong magnets like cow magnets?
10. List three physiological disorders and the elements associated with them.
11. What low density, self-protecting metal is used in electrical wiring, in constructing aircraft, and in making cookware?
12. What element is in sand, glass, and asbestos?
13. What are the main metals in brass?
14. Which elements have their valence electrons in the $5 f$ orbital?
15. List four elements used in fireworks and the color they would provide (hint - flame test color!).

USING ONLY YOUR PERIODIC TABLE, COMPLETE THE TABLE BELOW: Give the MOST SPECIFIC TYPE of element, for example, alkali metals, transition metals, non-metals, lanthanides, halogens, noble gases, etc.)

| ELEMENT | Block | Group | Period | Type of element |
| :--- | :--- | :--- | :--- | :--- |
| $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2}$ |  |  |  |  |
| $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2} 3 p^{6} 3 d^{10} 4 s^{2} 4 p^{6} 4$ <br> $d^{10} 5 s^{2} 5 p^{5}$ |  |  |  |  |
| $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2} 3 p^{6} 3 d^{5} 4 s^{2}$ |  |  |  |  |
| $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2} 3 p^{6} 3 d^{10} 4 s^{2} 4 p^{6} 4$ <br> $d^{10} 4 f^{4} 5 s^{2} 5 p^{6} 5 d^{1} 6 s^{2}$ |  |  |  |  |
| $1 s^{2} 2 s^{2} 2 p^{6} 3 s^{2} 3 p^{6}$ |  |  |  |  |
| $1 s^{2} 2 s^{1}$ |  |  |  |  |
| $1 s^{2} 2 s^{2} 2 p^{1}$ |  |  |  |  |

