

**PART A: EXPLORING THE TABLE**

In the periodic table, elements are arranged in order of their atomic numbers. With a couple of exceptions, atomic numbers are in the same order as atomic masses. That is, the lightest element has the lowest atomic number; the heaviest element has the highest atomic number.

- How many (a) periods & (b) groups are there? \_\_\_\_\_
- Ten different elements are listed in the chart. Find each element in the periodic table and then fill in the missing information.

| PERIOD | GROUP | ELEMENT   | SYMBOL | ATOMIC # |
|--------|-------|-----------|--------|----------|
| 2      | 16    |           |        |          |
| 3      | 1     |           |        |          |
|        |       | chlorine  |        |          |
|        |       | potassium |        |          |
|        |       |           | Fe     |          |
|        |       |           | He     |          |
|        |       |           |        | 80       |
|        |       |           |        | 10       |
|        |       |           | Sn     |          |
|        |       | arsenic   |        |          |

- The element from the chart above that is the lightest is \_\_\_\_\_.  
You know it is the lightest because it has the \_\_\_\_\_ atomic number. {highest/lowest}
- Which of these elements are metals? nonmetals? metalloids? {Indicate your answer by placing an M, N, L next to the name.}
- Two pairs of these elements have many properties that are alike.
  - Name the pairs of elements. \_\_\_\_\_
  - We know they are alike because they are in the same \_\_\_\_\_ {period/group}
- Name one metal that has properties like tin. \_\_\_\_\_
- Name two elements that have properties similar to chlorine. \_\_\_\_\_

**PART B: THE [AU] DUST KID**

With the aid of the periodic table in the back of your textbook complete the following story by writing the name of the element in the space provided. Watch your spelling!

The kid mounted his trusty steed, old [B] \_\_\_\_\_. His shooting [Fe] \_\_\_\_\_ strapped to his side, he headed out for the bright [Ne] \_\_\_\_\_ lights of Sabattus, aiming to rob the Litchfield stage. There was sure to be a load of precious [U] \_\_\_\_\_ aboard, and probably [K] \_\_\_\_\_, too. Inhaling a deep breath of [O] \_\_\_\_\_ he coughed on the [S] \_\_\_\_\_ from the nearby mills. Since the [Hg] \_\_\_\_\_ was climbing, he quenched his thirst with some H<sub>2</sub>O, tasting the [Cl] \_\_\_\_\_ deposits built up over years of riding the [Zn] \_\_\_\_\_ trail. Overhead a [He] \_\_\_\_\_-filled balloon floated in the breeze; the sun beat down like burning [P] \_\_\_\_\_.

Soon the Kid spotted the stage, guarded only by a sheriff with a [Sn] \_\_\_\_\_ badge. "Halt," he yelled, "or I'll fill you full of [Pb] \_\_\_\_\_." The sheriff drew his gun, but alas was too slow. The kid's gun, blazing like flaming [Mg] \_\_\_\_\_ did the [Cu] \_\_\_\_\_ in. Anyone who drew on the Kid should know his life wasn't worth a plugged [Ni] \_\_\_\_\_. A [Pt] \_\_\_\_\_ blonde inside the [Al] \_\_\_\_\_-framed coach was holding on for dear life when the Kid pulled out some [N] \_\_\_\_\_ compounds, preparing to blow the safe to atoms.

Suddenly, a shot range out, "Hi Ho [Ag] \_\_\_\_\_," and a masked man on a white horse raced across the [Si] \_\_\_\_\_ sands like [Na] \_\_\_\_\_ skittering on H<sub>2</sub>O; the Kid had met his doom. The rest of his life was to be spent behind [Co] \_\_\_\_\_-steel bars, a warning to all who flirt with danger. Your first detention may be the initial step in a [C] \_\_\_\_\_-copy life of the saga of the [Au] \_\_\_\_\_ dust Kid.