

## **Copy and Summarize – Physical Science Topic 15**

### INSTRUCTIONS:

- Neatly print your full name, date, and class period at the top of this page, and on the back.
- On the back of this page – copy the text below. Then summarize the concepts in your own words.

## **Atomic Properties and the Periodic Table**

### *Physical Science Topic 15*

The periodic table can be used to identify atomic behaviors/properties and predict the outcome of chemical reactions.

1. Elements are placed on the Periodic Table according to repeating patterns of physical and chemical properties, as well as reactivity patterns.
2. Atomic size decreases going across a period of the table due to increasing nuclear charge. Atomic size increases down a group of elements due to addition of energy levels.
3. All matter is conserved, just broken apart and rearranged to form new molecules/substances.
4. A chemical bond is an attractive force not a physical thing at all.
5. The electron cloud is a “cloud” because of the motion of the electron in orbit around the nucleus, and mostly made up of empty space.
6. Periods on the periodic table are based on the energy levels an atom has.
7. The atomic number of an atom indicates the number of protons an atom has which determines what element and therefore the chemical properties it possesses.
8. Changing the number of electrons an atom has will change its reactivity with atoms around it.

Student Name \_\_\_\_\_ Class Period \_\_\_\_\_ Today's Date \_\_\_\_\_

**Copy the Text Here (Use Additional Sheet of Paper, if Necessary)**

**Summarize the Text in Your Own Words. (Use complete sentences).**