**DO NOT WRITE ON THIS PAPER.**

**IT WILL BE COLLECTED AT THE END OF CLASS! ☺**

***SECTION 1: WHAT ARE THE BUILDING BLOCKS OF MATTER?***

Pages 67-71 in our textbook cover our first learning objective on matter and elements in cells. As an introduction, please complete the following assignment. For the questions you need to answer, please write your answer down **IN A COMPLETE SENTENCE** on page 69. Be sure to number them and leave room for everything to fit!

**1. Use the vocabulary squares and define the following words: (glue them in on page 69)**

* **Matter**
* **Elements**
* **Trace elements**
* **Atom**
* **Compound**

**2. What are the 6 most abundant elements in cells? What is the acronym to help you remember these elements?**

**3. What are the three parts of the atom (subatomic particles)? What are their charges?**

* *Turn to the periodic table on page 70. Find the 6 elements from question 2 and highlight them. On the top of the periodic table make yourself a key to remind you that those are the most abundant elements in living things.*
* *Turn to the periodic table on page 70. The trace elements I would like you to highlight are: Iodine (I), Potassium (K), Calcium (Ca), Iron (Fe), Magnesium (Mg), Sodium (Na) and Chlorine (Cl). On the top of the periodic table make yourself a key to remind you that those are trace elements in living things.*
* *On the back of this paper is a graphic showing the percentage of each element of the mass of a human. On your periodic table on page 70, find those elements and write the percentage of the human body they make up. Make yourself a key to remind you what the percentages represent.*
* *On page 67 there is a picture of a lithium atom. Color the protons red, the neutrons blue and the electrons black.*

**Sooner or later every one of us breathes an atom that has been breathed   
before by anyone you can think of who has lived before us-  
Michelangelo or George Washington or Moses.**

***Jacob Bronowski***

