Go to the following website to complete the worksheet…

<http://www.learner.org/interactives/periodic/index.html>

INTRODUCTION: The Periodic Table

1. The front page has p\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ t\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Click on “The Basics”.

ATOMIC BASICS: In The Beginning

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ was a philosopher who believed everything was made of atoms while \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ was a philosopher who believed everything was made of matter that contained 4 elements.
2. The four elements Aristotle believed all matter was made of were…
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Click on “modern concept of the atom”

ATOMIC BASICS: The Atom

1. What are the three subatomic particles all atoms are composed of?
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Click on “Lets find out”

ATOMIC BASICS: Atomic Structures

1. The basic atomic structures are….
   1. Protons are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charged and weighs \_\_\_\_\_ atomic mass and is located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Neutrons are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charged and weighs \_\_\_\_\_ atomic mass and is located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   3. Electrons are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charged and weighs \_\_\_\_\_ atomic mass and is located in the various \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the energy levels \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the atomic nucleus.
2. It would take \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrons to equal the mass of one proton.
3. Click on “The answer starts with something call periodicity”

ATOMIC BASICS: Periodicity

1. To show a regular repeating pattern is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The atomic number of an element is equal to the number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the nuclei.
3. An/a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an atom in which the number of protons differs from the number of electrons.
4. If an atom has more electrons than protons, the ion is known as an/a \_\_\_\_\_\_\_\_\_\_\_\_\_.
5. If an atom has fewer electrons than protons, the ion is known as an/a \_\_\_\_\_\_\_\_\_\_\_\_\_.
6. What happens if you add or subtract a proton from an element? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Click on “The periodic Table”

ATOMIC BASICS: The Periodic Table

1. Click on “Play Now”
2. Take the quiz until the “You’ve completed NAME THAT ATOM” information box pops-up. Have instructor initial the quiz has been completed. You may retake the test as many times as you like to get a desired score. This score will count as a test grade. Teacher initial \_\_\_\_\_\_\_\_\_\_\_\_\_ Student score\_\_\_\_\_\_\_\_\_\_\_\_.
3. Using the tabs at the top click on “What’s in the box”.

WHATS IN THE BOX: Periods

1. The horizontal rows are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The most energy levels currently found in an atom of an element at this time is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Click on “Groups”

WHATS IN THE BOX: Groups

1. Columns are commonly known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Click on “atomic numbers”

WHATS IN THE BOX: Atomic Number

1. The atomic number represents the number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ found in the nucleus of one atom.
2. It is the number of protons in the nucleus that determines what \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ you are working with.
3. If you add a proton to carbon then it becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. If you take away a proton from calcium then it becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Click on “Symbol”

WHATS IN THE BOX: Symbol

1. While some symbols are easy to figure out, others refer to older names for the element in different languages like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Click on “Relative Mass”

WHATS IN THE BOX: Relative Mass

1. The mass of an atom is that of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ found in the nucleus.
2. Click “PLAY NOW”
3. Take the quiz until the “NEXT CHAPTER ” icon pops-up. Have instructor initial the quiz has been completed. You may retake the test as many times as you like to get a desired score. This score will count as a test grade. Teacher initial \_\_\_\_\_\_\_\_\_\_\_\_\_ Student score\_\_\_\_\_\_\_\_\_\_\_\_.
4. Using the tabs at the top click on “Groups”.
5. Skim through the different types of groups/families
6. Name at least three ways the families are grouped by commonality
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_