Notes: Chapter 2 The Chemistry of Life Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Section 2.1 The Nature of Matter

1. Elements
2. An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a substance that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ down into simpler substances.
3. On earth, \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ occur \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Only about \_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to living organisms.
5. More than \_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_ of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is made up of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Atoms
7. An \_\_\_\_\_\_\_\_\_\_\_\_\_ is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ particle of an \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that has the characteristics of that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the atom is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The nucleus contains positively charged particles called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (p+) and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_ ), which have no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. Forming the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ around the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are even smaller particles called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(e-), which have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charge.
11. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ travel around the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in regions known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ levels or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ shells.
12. Each energy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or election shell has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ capacity for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The \_\_\_\_\_\_\_\_\_\_\_ level’s maximum is \_\_\_, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ level’s maximum is \_\_\_\_\_, and the \_\_\_\_\_\_\_\_\_ level’s maximum is \_\_\_\_\_\_.

Bohr’s Model: Draw and label the Oxygen Atom in this space.

1. Isotopes of an Element
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ element that have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ numbers of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The nuclei of some \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & tend to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ apart giving off \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Used in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to diagnose and/or \_\_\_\_\_\_\_\_\_\_\_\_\_ some diseases.

Reading the Periodic Table:

Sodium

11

Na

22.990