1. \_\_\_\_\_\_\_\_\_\_ are the basic building blocks of all matter

Atoms are made up of 3 subatomic particles:

* Protons – \_\_\_\_\_\_\_\_\_\_\_\_\_
* Neutrons – \_\_\_\_\_\_\_\_\_\_\_\_
* Electrons - \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Protons and Neutrons are found in the center of the atom.

* This region is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Electrons move around the nucleus in the region called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. The law of conservation of matter explains that \_\_\_\_\_\_\_\_ are never created or destroyed they can only \_\_\_\_\_\_\_\_\_ from one form to another.
2. An \_\_\_\_\_\_\_\_\_\_ is a substance that cannot be broken down into any other substances by physical or chemical means.

* An element is purely \_\_\_\_\_\_\_ type of atom
* For example in a sample of Sodium all the atoms look the same.

1. Sodium is represented by Na on the periodic table. It is #\_\_\_\_\_.

Can you find it on the table?

How come it is called sodium but its chemical symbol is Na?

Sodium, like many other elements, got its symbol from its \_\_\_\_\_\_\_ word \_\_\_\_\_\_\_\_\_\_.

Other examples are Mercury (\_\_\_\_\_), Iron (\_\_\_\_\_), and Potassium (\_\_\_\_)

1. This is a picture of the box on the periodic table for Oxygen. What do the letters and numbers in the box mean?
2. The information on the periodic table can also help you identify how many \_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ each element has.

* Complete the Atomic Math Challenge to learn more about this.

1. A \_\_\_\_\_\_\_\_ is a substance made up of two or more elements \_\_\_\_\_\_\_\_ combined in a specific ratio or proportion.
2. So when elements chemically \_\_\_\_\_\_\_ they can form compounds.
3. When compounds form the elements get totally \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Carbon Dioxide \_\_\_\_\_\_\_
* Baking soda \_\_\_\_\_\_\_\_\_
* Sugar \_\_\_\_\_\_\_\_\_\_
* Water \_\_\_\_\_\_\_\_\_