**Atoms Guided Notes**

**What is a pure substance?**

Is a substance in which there is a uniform composition of \_\_\_\_\_\_\_\_\_\_\_\_\_\_. The particles we are talking about are called \_\_\_\_\_\_\_\_\_\_.

**What is an element?**

A substance that contains only \_\_\_\_\_\_\_ type of atom. All known elements are arranged on the *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

***\*\*\*\*Meet the Elements Song (listen)***

**What is a compound?**

Is a combination of elements that come together through a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and becomes something called a \_\_\_\_\_\_\_\_\_\_\_\_\_.

+ A **molecule** is two or more different elements combined in a specific ratio.

**Example (picture on slide):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What is an atom?**

The smallest part of an element that has the same properties of that element. In Greek, it means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

These particles are too \_\_\_\_\_\_\_\_\_\_ to be seen with a microscope.

Atoms have all of the properties of matter: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and

\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

***\*\*\*\*Superman Image (look at and answer a few questions)***

**What does each movie poster in the Superman image represent?**

**What does the whole image of Superman represent?**

***\*\*\*\*Study Jams: Atoms Video (watch)***

**What is an atom made of?**

**Protons-** found in the atom’s nucleus. They have a \_\_\_\_\_\_\_\_\_\_\_\_ charge.

**Neutrons-**found in the atom’s nucleus and has \_\_\_\_\_\_\_ charge. The nucleus contains most of the atom’s \_\_\_\_\_\_\_\_\_\_.

**Electrons-**found circling the atom’s nucleus (outside). Each has a \_\_\_\_\_\_\_\_\_\_ charge.

***\*\*\*\*Complete the Label Me questions on the back of your notes.***

**What is the atomic number?**

The atomic number is the number of \_\_\_\_\_\_\_\_\_\_ in the nucleus of an atom. All atoms of the \_\_\_\_\_\_\_\_\_\_element have the same atomic number.

***\*\*\*\*What is the atomic number of the sodium atom and how do you know?***

***\*\*\*\*Draw the flow diagram for atoms below (summary of what you learned).***