

Atom Worksheet

Name: _____ Code No. _____

III Unit – Date: _____

Part I

Instructions: Match the definition with the vocabulary term using different colored pencils. Color each pair.

Element	A positively charged subatomic particle located in the nucleus of an atom
Atom	A subatomic particle found in the nucleus of an atom that has no charge
Proton	A small, dense region located in the center of an atom
Neutron	A substance that is made up of one kind of atom
Electron	The mass of an atom based on the sum of the protons and neutrons
Nucleus	A negatively charged subatomic particle located in a cloud around an atom's nucleus
Atomic Mass	The smallest particle of an element that cannot be broken down without changing the physical properties

Part II

Instructions: Use the vocabulary words from the box to fill in the missing information in the passage below.

element	atom	proton	neutron
electron	nucleus	atomic mass	

The primary constituent of matter is called a(n) _____ and is made up of _____. In the _____, or middle, of a atom are two types of subatomic particles: _____ and _____. The positively charged particles in the nucleus of an atom are called _____ while the uncharged particles in the nucleus are called _____. Orbiting the nucleus of an atom is a cloud of negatively charged

_____ . Therefore, to calculate the _____ of an atom, you find the sum of the protons and neutrons found in the atom.

Part III

Instructions: Choose the answer that best completes each statement.

1. A neutrally charged atom has 47 protons and an atomic mass of 108. How many neutrons does this atom have?

- a. 47 neutrons
- b. 155 neutrons
- c. 61 neutrons
- d. 108 neutrons

2. What types of subatomic particles are found in the nucleus of an atom?

- a. Only negatively charged particles
- b. Both neutrally and positively charged particles
- c. Only neutral particles
- d. The nucleus of an atom does not contain subatomic particles.

3. Which of the following best describes a proton?

- a. A subatomic particle that is very, very small and has a negative charge.
- b. A positively charged subatomic particle that is found in a cloud around the nucleus of an atom
- c. A neutral particle found in the nucleus of an atom
- d. A positively charged subatomic particle found in the nucleus of an atom

4. How do you find the atomic mass of an atom?

- a. Add the total number of electrons to the total number of protons.
- b. Subtract the number of protons from the number of neutrons
- c. Find the sum of protons and neutrons in an atom
- d. Subtract the total number of electrons from the number of neutrons in an atom.