



UNIT 3 – ATOMS, ELEMENTS, MOLECULES

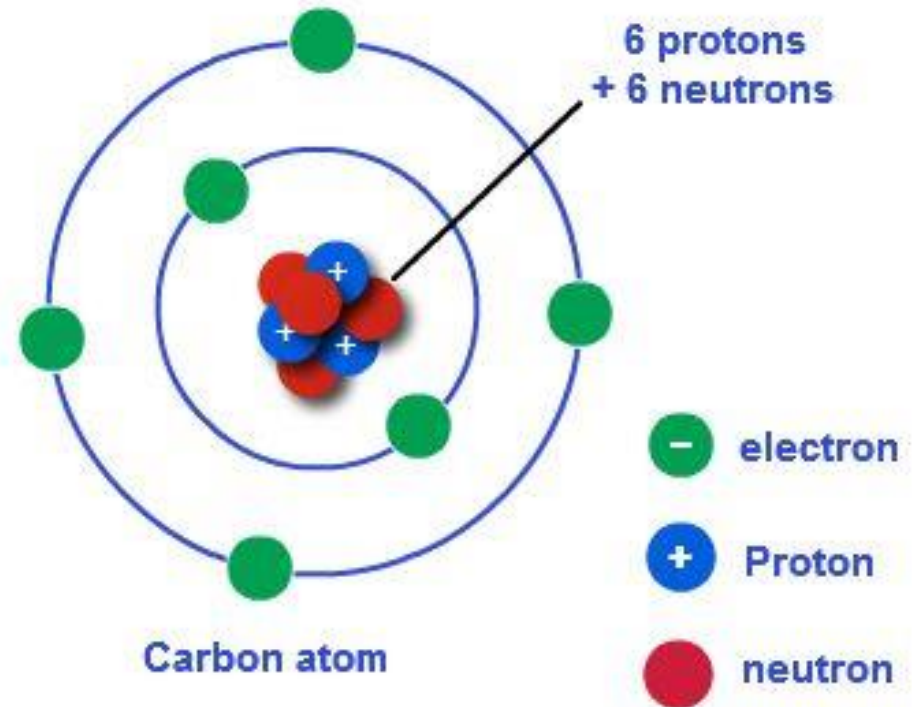
L4: Protons, Electrons,
and Neutrons – Oh My!

GUIDING QUESTION: EXPLAIN HOW TO EXTRACT INFORMATION FROM THE PERIODIC TABLE ABOUT ATOMIC STRUCTURE AND ATOMIC MASS.

Do Now:

Examine the model to the right.

What do you think the rings around the nucleus relate to on the periodic table? How do you think electrons are distributed on them?



NOTES

- When determining the mass number of an element:
 - Round the average atomic mass from the periodic table if neutrons are not given
 - Add protons and neutrons if neutrons are given.

NOTES

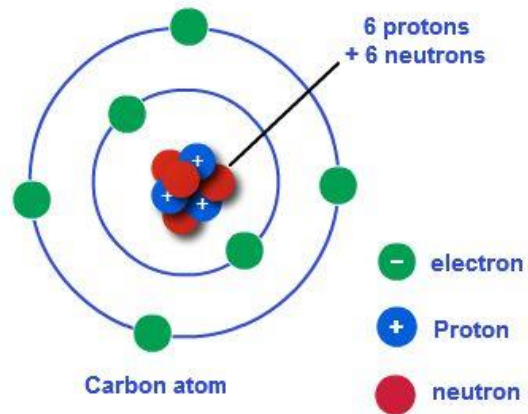
- Neutrons will never tell you the identity of an element. Neither will atomic mass or mass number.
- Protons (or atomic number) are the only reliable way to determine the identity of an element

NOTES

- Protons and neutrons are found in the nucleus. Electrons are outside of the nucleus in an electron cloud. The electron cloud is represented as rings.
- **An element gets rings equal to the period (or row) that the element is in:**

Carbon is in period 2 so it has 2 rings

- Electrons are added to each ring by period, according to how many elements it has in it.



- You keep adding electrons until you reach the element you are studying, no more.

CHECK IN

Draw the solar system model for the following elements (include key):

➤ Magnesium

➤ Sulfur



CLOSURE

Achieve 3000 “There’s Gold in that Ocean” due Friday, 11/10 11:59pm