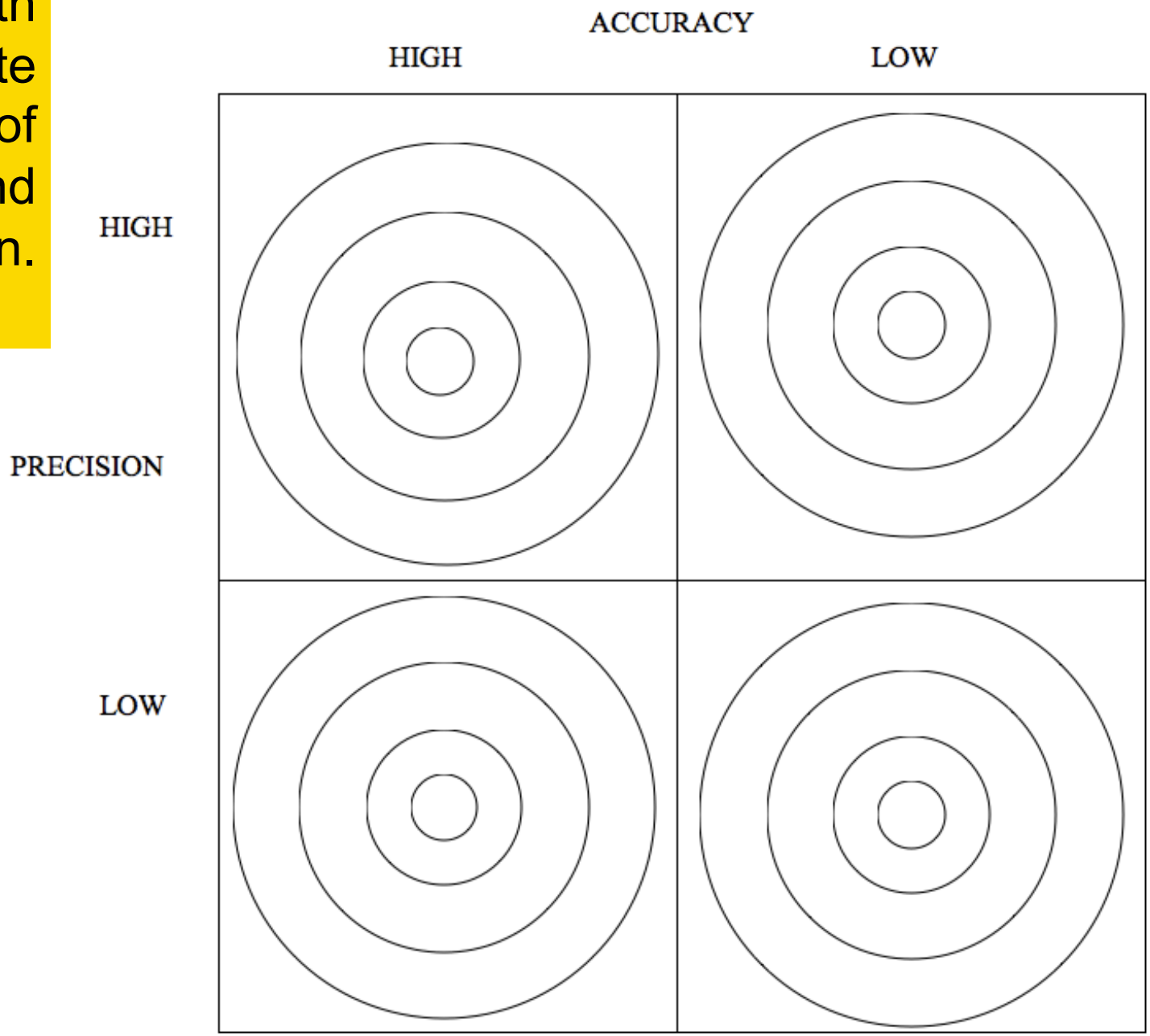
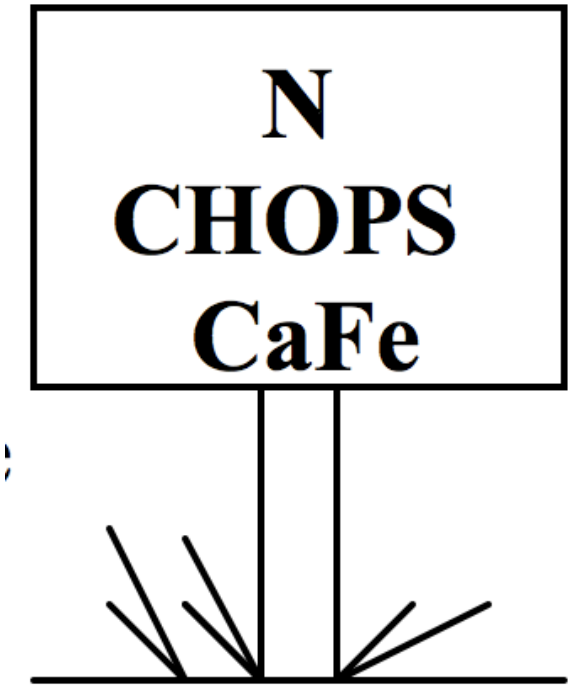
Homework Review

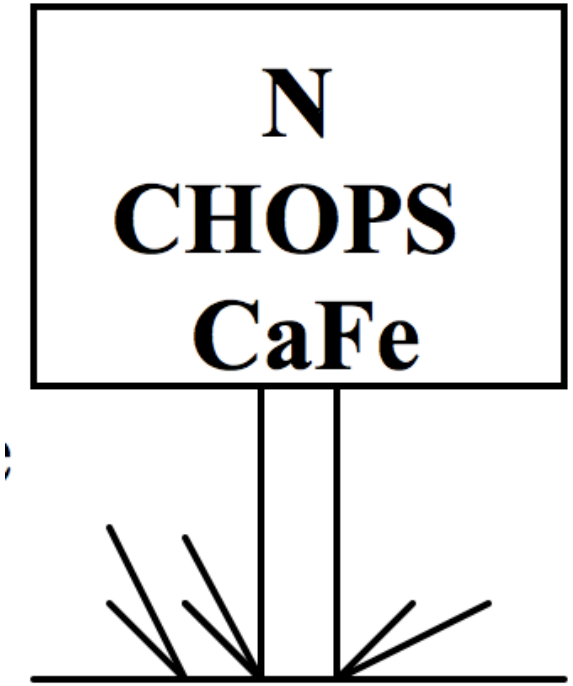
Place 4 dots on each target with the appropriate level of accuracy and precision.



Can you explain the sign below? What do the letters stand for?



Served with a "grain of NaCl."



Served with a "grain of NaCl."

These are the chemical elements that are essential for most living organisms.

Objective

- I can identify the main elements that are important to the human body.

Brain POP questions

1. What are the most abundant elements in our body?

2. Where do the elements come from?

3. What substances do the elements make in our body?

4. What is the difference between an element and compound?

https://www.brainpop.com/health/bodysystems/bodychemistry/

Matter and Elements

- Organisms are composed of matter
- Matter is anything that takes up space and has mass
- Matter is composed of chemical elements
  - There are 92 naturally occurring elements on Earth

What is an element?

- An element is any substance that cannot be broken down into simpler substances.
- The smallest unit of an element is a particle called an atom.
- Any single element is made of only one kind of atom.

A compound is

- A substance that is composed of two or more separate elements.

- Examples: H_2O, CO_2, NaCl

Thursday 09/08/2016

Daily Science Question:

What is the difference between an element and a compound?

Watch the following video and respond to the questions:

- http://studyjams.scholastic.com/studyjams/jams/science/matter/atoms.htm

1. What is an atom?

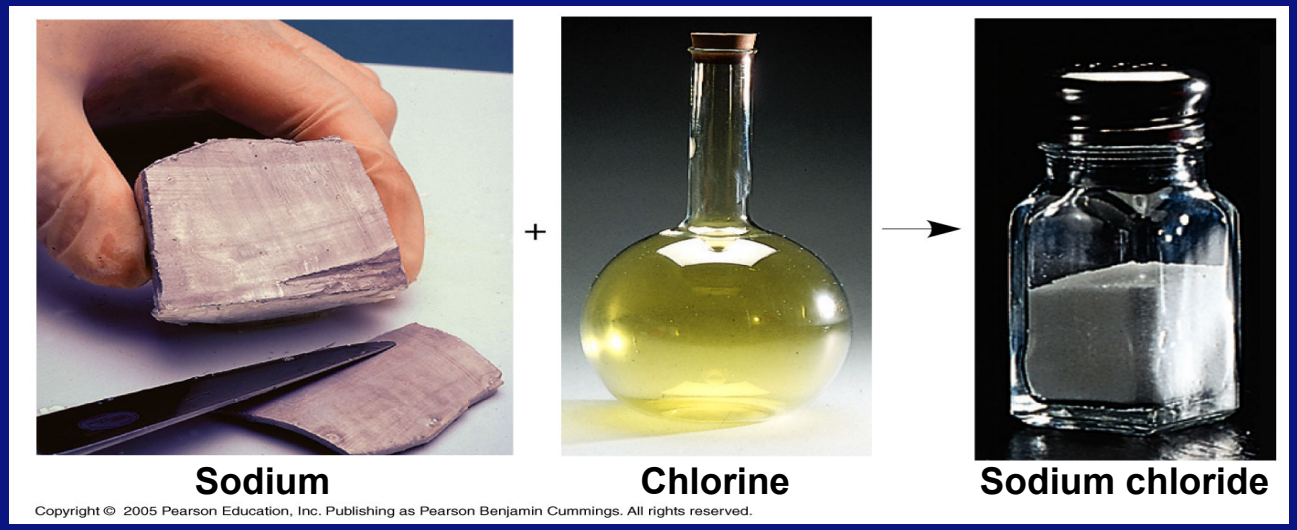
2. What is at the center of the atom?

3. What two subatomic particles make up the center of the atom?

4. What kind of charge do protons, neutrons and electrons have?

Atoms

- An atom is the smallest unit of matter that still retains the properties of an element, it cannot be broken down to other substances.
- Each element consists of one kind of unique atom



Atoms

- Atoms are composed of:

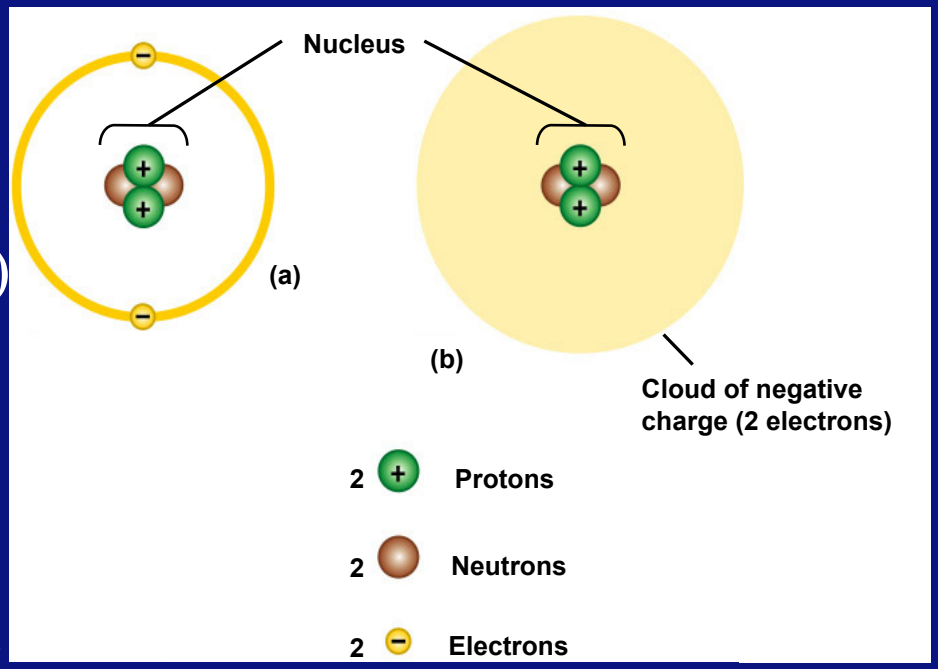
  Neutrons (no electrical charge)

  Protons (positive charge)

  Electrons (negative charge)

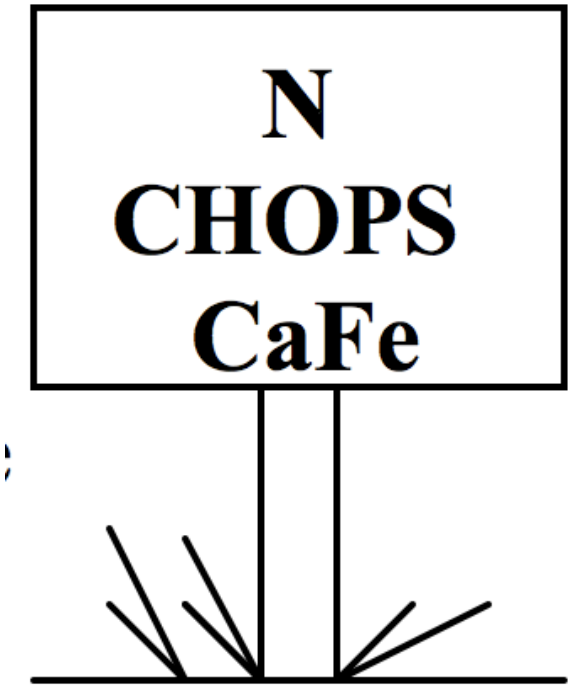
- Neutrons and protons form the atomic nucleus

- Electrons form a cloud around the nucleus



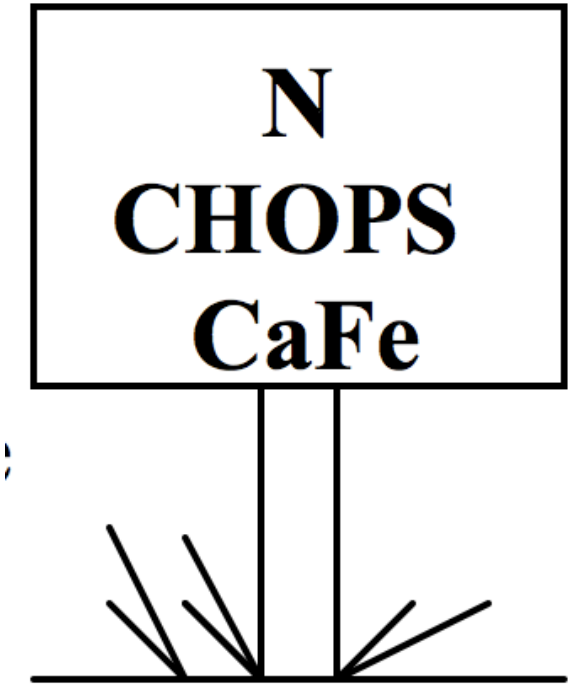
On your copy of the periodic table locate and highlight the names for each element from the sign .

- http://www.ptable.com



Served with a "grain of NaCl."

With your partner: Create a list placing the essential elements in order of importance; estimate the total percentage present in the human body.



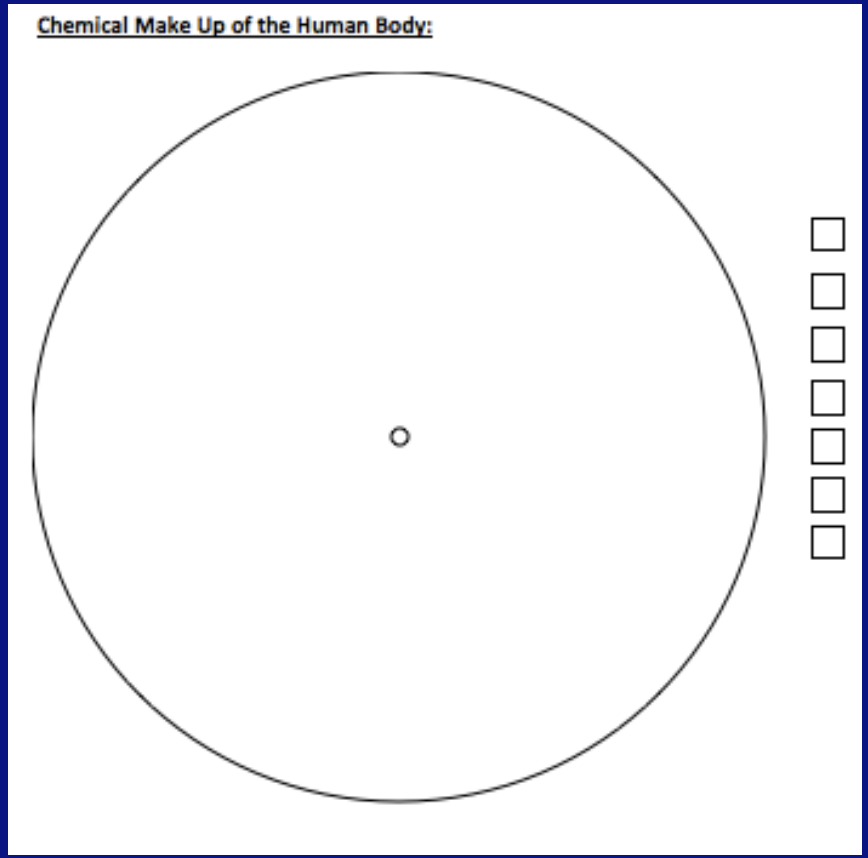
Served with a "grain of NaCl."

Our body contains:

- Oxygen-65%
- Carbon-18.5%
- Hydrogen-9.5%
- Nitorgen-3.2%
- Calcium-1.5%
- Phosphorus -1.0%

Create a pie chart using the numbers below to display elemental presence.

- Oxygen-65%
- Carbon-18.5%
- Hydrogen-9.5%
- Nitorgen-3.2%
- Calcium-1.5%
- Phosphorus -1.0%



Elements Essential to Life

- Four of these make up about 96% of the weight of the human body
- Trace elements occur in smaller amounts

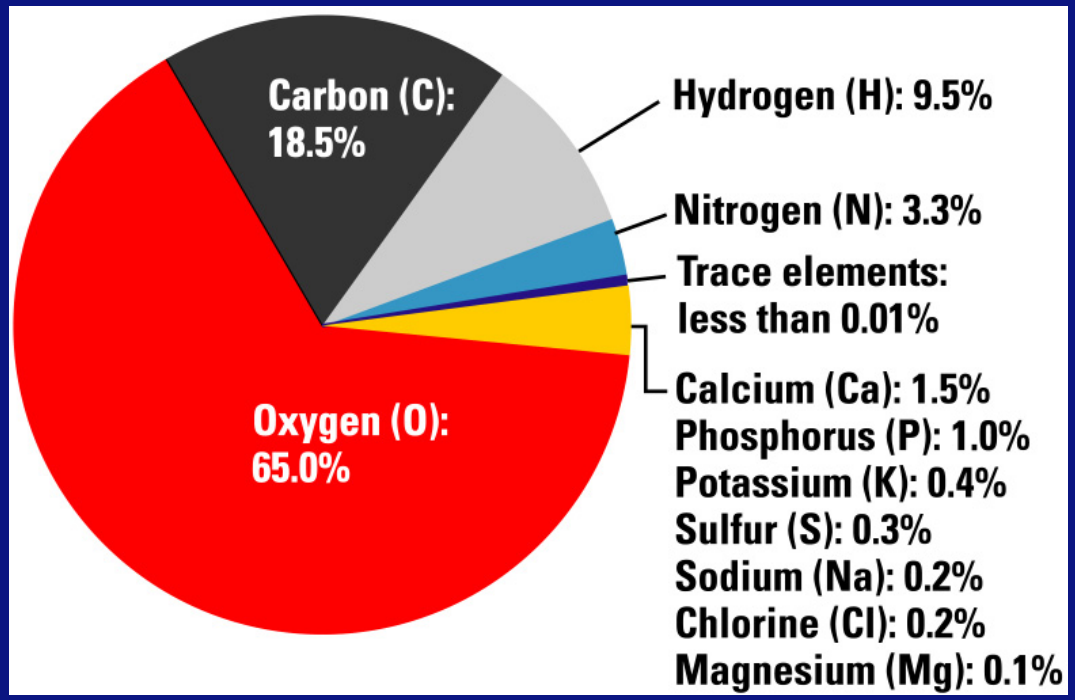
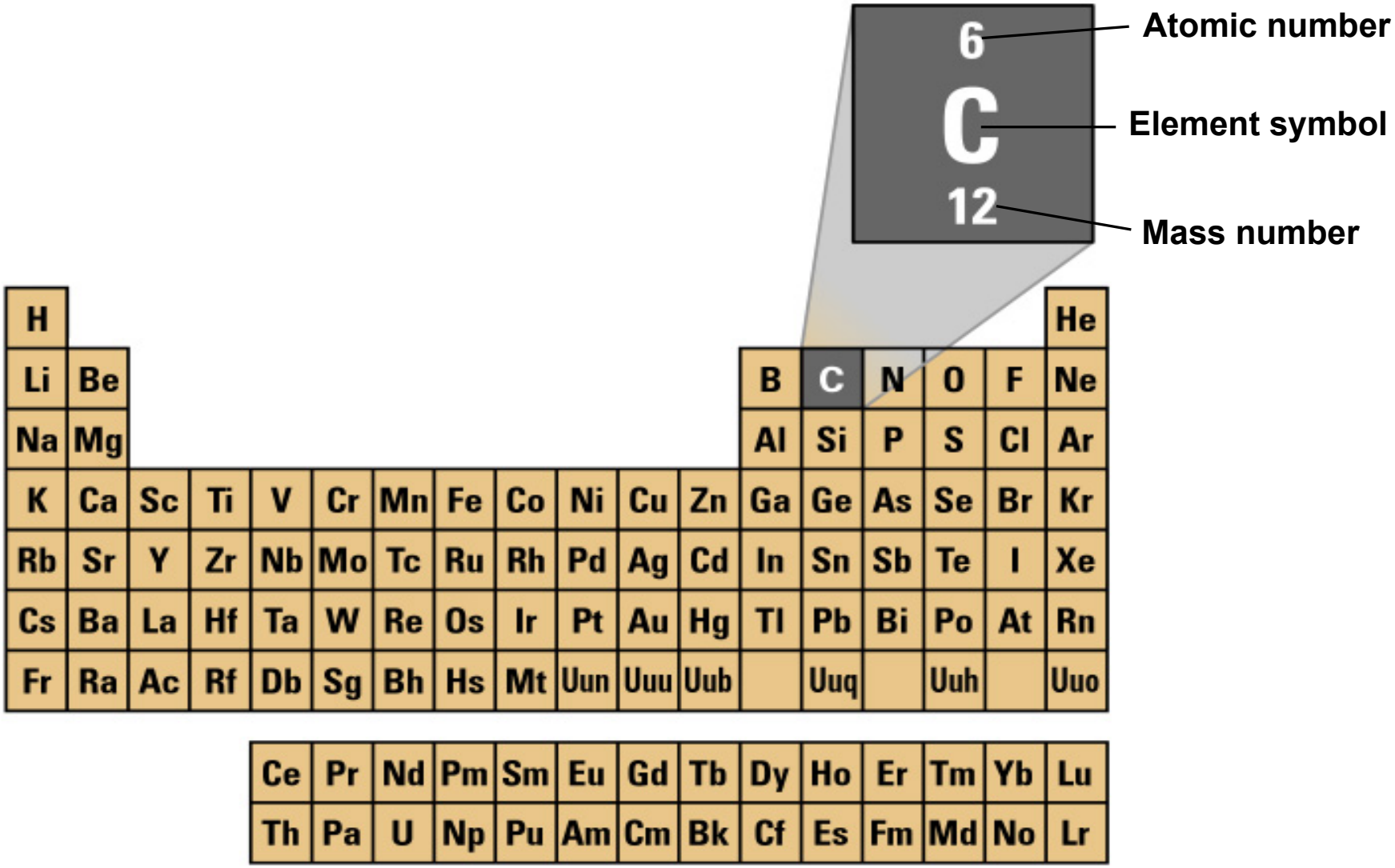


Figure 2.3

Periodic Chart



Atomic Number and Atomic Mass

- An element's atomic number is the number of protons
- In a neutral atom, the number of protons equals the number of electrons.
- An element's mass number is the sum of protons plus neutrons in the nucleus

Find an atom that has…(activity)

- http://www.ptable.com