

Name: \_\_\_\_\_  
PT quiz review

Period: \_\_\_\_\_  
Date: \_\_\_\_\_

Matching (there may be more than one letter for each description):

- |            |                               |             |
|------------|-------------------------------|-------------|
| <u>A+B</u> | Located in the nucleus        | A. Proton   |
| <u>A</u>   | Positively charged            | B. Neutron  |
| <u>A+C</u> | Attracted to one another      | C. Electron |
| <u>B</u>   | Neutrally charged             |             |
| <u>C</u>   | Located in the electron cloud |             |
| <u>C</u>   | Negatively charged            |             |
| <u>A+C</u> | Equal in numbers              |             |

2. If an atom has 8 protons, then how many electrons will it have?

8 electrons

3. Which subatomic particle is the only one that does not change and determines the identity of an element?

Protons

4. Isotopes are atoms that have the:

- a. Same # of protons and neutrons
- b. Same # of protons but different #s of neutrons
- c. Different #s of protons but same # of neutrons

5. Determine the number of protons and neutrons for the following isotopes (hint: use atomic # for protons):

- |                       |                         |                           |
|-----------------------|-------------------------|---------------------------|
| a. Oxygen <u>18</u> : | # of protons = <u>8</u> | # of neutrons = <u>10</u> |
| b. Oxygen <u>16</u> : | # of protons = <u>8</u> | # of neutrons = <u>8</u>  |

6. True/False: Periods go left to right, and groups go down..

7. What is the atomic symbol for the element in period 4 group 13? Ga

8. What is the atomic name for the element in period 6 group 8? Osmium

9. Use the word bank to label the element square:

Atomic mass

Atomic symbol

Atomic number

Atomic name

26 ←	Atomic #
Fe ←	Atomic symbol
Iron ←	Atomic name
56 ←	Atomic mass

10. Use your periodic table to complete the information for the elements below:

- For the element in period 4 group 15:

Atomic number = 33  
# protons = 33  
# electron = 33  
Atomic symbol = As  
Atomic name = Arsenic  
Atomic mass = 75  
# Neutrons = 42

- For the element in period 7 group 2:

Atomic number = 88  
# protons = 88  
# electron = 88  
Atomic symbol = Ra  
Atomic name = Radium  
Atomic mass = 226  
# Neutrons = 138

11. Atomic size decreases as you go left to right across a period but it increases as you go down a group.

12. Which atom will be bigger in size?

Iron

or

Potassium

\* Atomic size is not the same as atomic mass!  
Iron has a bigger atomic mass.

13. Matching

B Brittle and poor conductor  
B Oxygen  
A Nickel  
A Very shiny and reactive  
A Corrodes  
A Malleable  
C Boron  
C Mix of all characteristics

A. Metal  
B. Non-metal  
C. Metalloid

14. Which two elements in Group 14 on the periodic table are most likely to be malleable and good conductors of electricity?

Tin + Lead

15. A) In what order did Dmitri Mendeleev arrange the elements in the first periodic table?

Increasing Atomic mass

B) What pattern did Dmitri Mendeleev discover when he arranged the elements?

Properties of elements repeated