

Name: _____
 Date: _____
 Class: _____

1. What characteristics are shared by all alkali metals and alkaline earth metals?

- a. They conduct electricity very well
- b. They are strong and shiny
- c. They form alkaline solutions when mixed with water
- d. They do not react with water at all

2. Carbon has an atomic number of 6. What can you conclude about carbon from this fact?

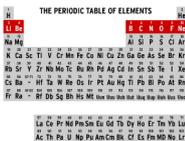
- a. It has six protons
- b. It has six neutrons
- c. It's in group 6
- d. It's in period 6

3. Noble gases are sometimes called "inert gases." What can you infer about the meaning of the word "inert" in chemistry?

- a. It refers to substances that easily lose electrons
- b. It refers to substances that do not react with other substances
- c. It refers to substances that have strong electrochemical charges
- d. It refers to gases

4.  What do the orange and yellow spheres represent in this model of an atomic nucleus?

- a. Gluons and leptons
- b. Protons and neutrons
- c. Positrons and electrons
- d. Atoms and molecules

5.  What do the elements highlighted in red have in common?

- a. The same number of protons
- b. The same number of electrons
- c. The same number of neutrons
- d. The same number of electron shells

6. Which of the following is a true statement?

- a. Periods form horizontal rows; groups form vertical columns
- b. Groups form horizontal rows; periods form vertical columns
- c. Categories form horizontal rows; gases form vertical columns
- d. Gases form horizontal rows; categories form vertical columns

7. What is true of all atoms?

- a. They are electrically charged.
- b. They contain more than one electron shell.
- c. They have full outer electron shells.
- d. They contain at least one proton.

8. What is one key physical difference between transition metals and poor metals?

- a. Atomic mass
- b. Hardness
- c. Reactivity
- d. Charge

9. If you wanted to find a sample of fermium, which has an atomic number of 100, where would you look?

- a. Deep within the Earth
- b. In the Earth's atmosphere
- c. In outer space
- d. In a science lab

10. To become positively charged, an atom must:

- a. Gain a proton
- b. Lose a proton
- c. Gain an electron
- d. Lose an electron