

Chem 1 Basic Atomic Structure Test Practice Questions: In class

1.

The atoms in an element are:

- All the same type
- Two types joined together
- About a hundred different types

2.

An atom consists of:

- An electron surrounded by a nucleus
- A nucleus containing electrons
- A nucleus surrounded by electrons

3.

What is the correct chemical symbol for sodium?

- NA
- Na
- na

4.

What are the groups in the periodic table?

- A row of similar elements
- A column of similar elements
- The boxes in the table

5.

How many protons, neutrons and electrons are there in a Al-27 atom?

- 13 protons, 27 neutrons and 14 electrons
- 13 protons, 27 neutrons and 13 electrons
- 13 protons, 14 neutrons and 13 electrons

Show your calculation for neutrons:

6.

Which of the following does the nucleus contain?

- protons and electrons
- protons and neutrons
- neutrons and electrons

7.

Which of the following statements is correct?

- Protons are positively charged and neutrons are negatively charged.
- Protons are negatively charged and electrons are positively charged.
- Protons are positively charged and electrons are negatively charged.

8.

What is the atomic number of an atom?

- The number of atoms it contains.
- The number of protons it contains.
- The number of neutrons it contains.

9.

Which of the following statements is true of an atom?

- The number of protons is always equal to the number of neutrons.
- The number of protons is always equal to the number of electrons.
- The number of neutrons is always equal to the number of electrons.

11. He has an atomic number of 2 and mass number of 4. The number of electrons in a neutral atom of He is _____

- 4
- 2
- 6

12. Atoms with the same number of protons but different number of neutrons are called _____.

- ions
- nuclei
- isotopes

13. The mass of a proton is _____.

- 1/1840 amu
- 2 amu
- 1 amu

14. The number of protons in a neutral atom will be equal to the number of _____.

- neutrons
- electrons
- electrons + neutrons

15. What is the mass number of a Cl atom which has 17 protons and 18 neutrons?

- 17
- 18
- 35

16. The mass of a neutron is _____.

- 1/1840 amu
- 2 amu
- 1 amu

17. Bromine (Br) has 35 protons and a rounded atomic mass of 80 amu. What is the number of neutrons in an atom of Br?

- 35
- 45
- 80

18. The negatively charged particles of an atom are the _____.

- electrons
- protons
- neutrons

19. Most of the atom is _____.

- protons
- nucleus
- empty space

20. The subatomic particles found in the nucleus of an atom are:
- protons and neutrons
 - protons and electrons
 - neutrons and electrons
21. The mass number of an atom is the sum of the numbers of the _____.
- protons and neutrons
 - electrons and protons
 - neutrons and protons
22. An atom as a whole is _____.
- electrically neutral (has no charge).
 - positively charged.
 - negatively charged.
23. The particles with no charge in an atom are the _____.
- electrons
 - protons
 - neutrons
24. The relative mass of an electron is _____.
- 1 amu
 - 0 or $1/1840$ amu
 - 2 amu
25. The atomic number of the isotope O-18 atom is 8. Its mass number is 18. The number of neutrons in this isotope _____.
- 8
 - 10
 - 18
26. What is the number of electrons of a Cl atom which has 17 protons and 18 neutrons?
- 17
 - 18
 - 35