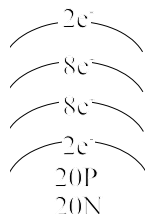


Answer the multiple choice questions below by circling the number of the correct response

1. What is the electron configuration of a sulfur atom in the ground state? (1) 2-4 (2) 2-6 (3) 2-8-4 (4) 2-8-6
2. A neutral atom always has an equal number of (1) neutrons and electrons, (2) neutrons and protons, (3) protons and electrons, (4) protons, electrons, and neutrons.
3. Below is a Bohr-Rutherford diagram of an element.



Which element could be represented by this diagram? (1) calcium (2) cadmium (3) chlorine (4) no known element

4. In the box provided, draw the electron-dot (Lewis) structure of an atom of calcium.

5. In the box provided, draw the electron-dot (Lewis) structure of an atom of chlorine.

6. Which is the electron dot structure for the atom whose electronic structure is 2-8-7? (1) $\cdot\dot{X}\cdot$ (2) $\dot{X}\cdot$ (3) $\cdot\ddot{X}\cdot$ (4) $\cdot\ddot{X}:$

7. What is the total number of electrons in the second principal energy level of a calcium atom in the ground state? (1) 6 (2) 2 (3) 8 (4) 18

8. If $\cdot\ddot{X}\cdot$ represents the electron-dot symbol of an element, that element could be (1) C (2) O (3) B (4) N