

1. How many valence electrons does oxygen have?

- A) 3 B) 4 C) 5 D) 6 E) 7

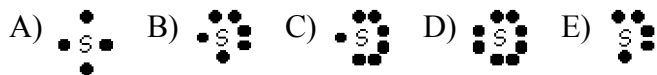
2. The electron dot symbol for nitrogen is.



The element represented by an identical electron dot arrangement is

- A) $^{10}_5\text{B}$ B) $^{31}_{15}\text{P}$
 C) $^{32}_{16}\text{S}$ D) $^{40}_{20}\text{Ca}$
 E) $^{16}_8\text{O}$

3. The Lewis Dot diagram for an atom of sulfur, $^{16}_8\text{S}$, in the ground state is



4. What is the Lewis electron-dot diagram for neutral atoms of element 12?

- A) $^{2+}$ B) $\text{Mg} \bullet \bullet$
 C) Mg D) Mg^{+2}
 E) $^{2+}$

5. What is the Lewis electron-dot diagram for aluminum, Al, in the ground state?

- A) $^{3+}$ B) Al^{3+}
 C) D)
 E) $^{3+}$

6. Which is the Lewis electron-dot diagram for a barium ion, ^{46}Ba ?

- A) $\text{Ba} \bullet \bullet$ B) $^{2+}$
 C) $^{+2}$ D) $^{2+}$
 E) $^{2+}$

7. Which is the Lewis electron-dot diagram for a phosphide ion?

- A) P^{3-} B) $^{3-}$
 C) $^{3-}$ D) $^{3-}$
 E) $^{3-}$

8. What is the Lewis electron-dot diagram for the sulfide ion?

- A) S^{2-} B) $^{2-}$
 C) $^{2-}$ D) $^{2-}$
 E) $^{2-}$

9. What is the Lewis electron-dot diagram for a rubidium ion (element 37)?

- A) $\text{Rb} \bullet$ B) $^{+}$
 C) $^{+}$ D) $^{+}$
 E) $\text{Rb} \bullet^{+}$

10. The Lewis Dot diagram for a chloride ion, Cl^{-} , is

- A) $^{-}$ B) $^{-}$
 C) $^{-}$ D) $^{-}$
 E) $^{-}$