

1. What is the name given to the first series of transition metals?

- A. Lanthanides
- B. Actinides
- C. d-block
- D. f-block

2. How many valence electrons does scandium have?

- A. 2
- B. 3
- C. 4
- D. 5

3. What is the name of the element with atomic number $Z=44$?

- A. Ruthenium
- B. Rhodium
- C. Palladium
- D. Silver

4. Which of the following is NOT a property of transition metals?

- A. They have high melting and boiling points.
- B. They are good conductors of electricity and heat.
- C. They form colored compounds.
- D. They are found in nature in the +2 oxidation state.

5. Which of the following is the correct order of increasing atomic radius?

- A. $\text{Ti} < \text{Zr} < \text{Hf}$
- B. $\text{Zr} < \text{Hf} < \text{Ti}$
- C. $\text{Hf} < \text{Zr} < \text{Ti}$
- D. $\text{Hf} < \text{Ti} < \text{Zr}$

6. Which of the following is NOT a lanthanide?

- A. Praseodymium
- B. Neodymium
- C. Plutonium
- D. Samarium

7. Which of the following is NOT an actinide?

- A. Curium
- B. Plutonium
- C. Americium
- D. Neptunium

8. What is the name of the element with atomic number $Z=96$?

- A. Curium
- B. Plutonium
- C. Americium
- D. Neptunium

9. What is the name of the element with atomic number $Z=89$?

- A. Actinium
- B. Thorium
- C. Protactinium
- D. Uranium

10. Which of the following is the correct order of increasing atomic radius?

- A. $\text{La} < \text{Ce} < \text{Pr}$
- B. $\text{Ce} < \text{Pr} < \text{La}$
- C. $\text{Pr} < \text{La} < \text{Ce}$
- D. $\text{Pr} < \text{Ce} < \text{La}$

Answer Key:

- 1. C
- 2. B
- 3. A
- 4. D
- 5. C
- 6. C
- 7. D
- 8. D
- 9. C
- 10. B