

*This practice test is a general guideline to help you study. It is NOT a definitive list. There are potentially things on here that will not show up on the test, and there are potentially things not on this list that will show up on the test. Material that appeared in Warm Ups, Notes, Homework, Classwork, Labs, Study Materials, etc are all have the potential to appear on the test. **Please time yourself! This part of the practice test should take a maximum of 19 minutes to ensure you are going fast enough to finish the actual Test in class!***

- The elements chlorine and iodine have similar chemical properties because they
 - are both metals
 - are in the same chemical period
 - have the same number of electrons in their outer energy levels
 - have the same number of stable isotopes
 - none of these
- The noble gases contain how many valence electrons?
 - 1
 - 7
 - 0
 - 8
 - none of these
- The # of electrons in the third sublevel of an iron atom is
 - 3
 - 6
 - 8
 - 26
 - 56
- Which element has the fewest electrons in its valence shell?
 - Cs
 - Mg
 - P
 - O
 - Br
- The element with atomic number 113 would be a member of
 - the halogens
 - the transition elements
 - the noble gases
 - the Group 13 elements
 - none of these
- Rank the following from **smallest to largest** atomic radius.
 - O, Zn, Ca, Ba
 - O, Ca, Zn, Ba
 - Ba, Ca, Zn, O
 - O, Zn, Ba, Ca
 - Ca, Ba, Zn, O
- Which of the following has the smallest atomic radius?
 - N
 - F
 - Br
 - Cl
 - S
- Which of the following has the highest ionization energy?
 - Al
 - Si
 - P
 - As
 - Sb
- Which of the following exhibits the correct orders for both atomic radius and ionization energy, respectively?
 - S, O, F, and F, O, S
 - F, S, O, and O, S, F
 - S, F, O, and S, F, O
 - F, O, S, and S, O, F
 - none of these
- Order S, Cl, and F in terms of increasing ionization energy.
 - S, Cl, F
 - Cl, F, S
 - F, S, Cl
 - F, Cl, S
 - S, F, Cl
- Order S, Cl, and F in terms of increasing atomic radii.
 - S, Cl, F
 - Cl, F, S
 - F, S, Cl
 - F, Cl, S
 - S, F, Cl
- Order the following ions from **smallest to largest atomic size**.
As³⁻, Se²⁻, Sr²⁺, Rb⁺, Br⁻
 - As³⁻ < Se²⁻ < Br⁻ < Rb⁺ < Sr²⁺
 - Sr²⁺ < Rb⁺ < As³⁻ < Se²⁻ < Br⁻
 - As³⁻ < Se²⁻ < Br⁻ < Sr²⁺ < Rb⁺
 - Rb⁺ < Br⁻ < Sr²⁺ < As³⁻ < Se²⁻
 - Sr²⁺ < Rb⁺ < Br⁻ < Se²⁻ < As³⁻
- A phosphorus atom needs to gain _____ electrons to achieve a noble gas configuration.
 - 2
 - 3
 - 4
 - 5
 - 6

check answers with key on the back

Answer Key

1. C
2. D
3. B
4. A
5. D
6. A
7. B
8. C
9. D
10. A
11. D
12. E
13. B

****Has not been checked! Please tell me if you see typos!!!****