



Answer all the questions below then check your answers

1. Which scientist is credited with creating the first periodic table?
 - a) Dmitri Mendeleev
 - b) Marie Curie
 - c) Albert Einstein
 - d) Isaac Newton
2. How are the elements arranged in the modern periodic table?
3. What are the chemical symbols for the following elements:
 - a) Sodium
 - b) Carbon
 - c) Oxygen
 - d) Helium
4. Complete the sentence by Filling in the Blanks: The elements in the periodic table are arranged in rows called _____ and columns called _____.
5. What information does the group in the periodic table an element is found in provide?
6. Which of the following elements is a noble gas?
 - a) Oxygen

b) Neon

c) Sodium

d) Calcium

7. True or False: Elements in the same group of the periodic table have similar chemical properties.

8. Explain how Mendeleev's periodic table was different from the modern periodic table.

9. Discuss the contributions of Dmitri Mendeleev to the development of the periodic table, including how he organized elements and predicted the properties of undiscovered elements.

10. Which element has the highest atomic number?

a) Hydrogen

b) Oxygen

c) Uranium

d) Helium

11. True or False (1 mark): All elements in the same period of the periodic table have the same number of electron shells.

12. What is the atomic number of the following elements:

a) Carbon

b) Sodium

c) Oxygen

d) Iron

13. True or False (3 marks): Elements in the same group of the periodic table have similar atomic masses.

Answers

- Which scientist is credited with creating the first periodic table?
 - Dmitri Mendeleev
 - Marie Curie
 - Albert Einstein
 - Isaac Newton
- How are the elements arranged in the modern periodic table? *According to their atomic number.*
- What are the chemical symbols for the following elements:
 - Sodium *Na*
 - Carbon *C*
 - Oxygen *O*
 - Helium *He*
- Complete the sentence by Filling in the Blanks: The elements in the periodic table are arranged in rows called periods and columns called groups.
- What information does the group in the periodic table an element is found in provide? *The number of valency/electrons in their outer shell*
- Which of the following elements is a noble gas?
 - Oxygen
 - Neon*
 - Sodium
 - Calcium

7. True or False: Elements in the same group of the periodic table have similar chemical properties. *True*
8. Explain how Mendeleev's periodic table was different from the modern periodic table.

Mendeleev's periodic table was different from the modern periodic table in that he left gaps for undiscovered elements and predicted their properties based on the trends he observed in known elements. Additionally, Mendeleev arranged elements primarily by increasing atomic mass, whereas the modern periodic table arranges elements by increasing atomic number.

9. Discuss the contributions of Dmitri Mendeleev to the development of the periodic table, including how he organized elements and predicted the properties of undiscovered elements.
 - *Mendeleev organized the elements based on increasing atomic mass and observed periodic trends in properties such as atomic volume and chemical reactivity.*
 - *He left gaps in his table for undiscovered elements and predicted their properties based on the trends of known elements, which was a significant contribution to the development of the periodic table.*
 - *Mendeleev's table was one of the first attempts to organize the elements systematically, and it laid the foundation for the modern periodic table.*
 - *Despite some discrepancies, Mendeleev's predictions were remarkably accurate, and his work contributed to the eventual acceptance and refinement of the periodic table.*
10. Which element has the highest atomic number?
 - a) *Hydrogen*
 - b) *Oxygen*
 - c) *Uranium*
 - d) *Helium*

11. True or False (1 mark): All elements in the same period of the periodic table have the same number of electron shells. *True*

12 What is the atomic number of the following elements:

a) Carbon *6*

b) Sodium *11*

c) Oxygen *8*

d) Iron *26*

13. True or False (3 marks): Elements in the same group of the periodic table have similar atomic masses. *False*