

Periodic Table Quiz Answer Key PDF

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Which of the following is a noble gas?

- A. Helium ✓**
- B. Hydrogen
- C. Carbon
- D. Nitrogen

Which elements have their outermost electrons in the p-block? (Select all that apply)

- A. B ✓**
- B. Carbon ✓**
- C. Nitrogen ✓**
- D. Calcium

Which elements are known for their high reactivity with water? (Select all that apply)

- A. Sodium ✓**
- B. Potassium ✓**
- C. Calcium
- D. Magnesium

Which of the following elements are transition metals? (Select all that apply)

- A. Iron ✓**
- B. Copper ✓**
- C. Zinc ✓**
- D. Calcium

Which element is the lightest?

- A. Helium
- B. Lithium
- C. Hydrogen ✓**
- D. Beryllium

Which element is known for its role in photosynthesis?

- A. Carbon
- B. Oxygen ✓**
- C. Nitrogen
- D. Chlorophyll

Which element is commonly used in making computer chips?

- A. Silicon ✓**
- B. Gold
- C. Copper
- D. Silver

Which element has the highest atomic number?

- A. Hydrogen
- B. Uranium
- C. Helium
- D. Oganesson ✓**

Which element is a liquid at room temperature?

- A. Mercury ✓**
- B. Iron
- C. Lead
- D. Zinc

Which of the following are halogens? (Select all that apply)

- A. Fluorine ✓**
- B. Chlorine ✓**

C. Iodine ✓

D. Neon

Describe the significance of Henry Moseley's contribution to the Periodic Table.

Henry Moseley established that the atomic number, not atomic mass, is the proper basis for the organization of the Periodic Table, leading to a more accurate arrangement of elements.

How has the discovery of synthetic elements impacted the modern Periodic Table?

The discovery of synthetic elements has expanded the Periodic Table, allowing scientists to explore new chemical properties and potential applications, and has confirmed the predictive power of the table's structure.

Explain why the symbol for Lead is Pb.

The symbol Pb comes from the Latin word 'plumbum,' which means lead.

Describe the general properties of metalloids and provide two examples.

Metalloids have properties intermediate between metals and nonmetals. They are semiconductors and can be shiny or dull. Examples include Silicon and Germanium.

Discuss how ionization energy changes across a period and why.

Ionization energy generally increases across a period due to increasing nuclear charge, which attracts electrons more strongly, making them harder to remove.

Explain why elements in the same group have similar chemical properties.

Elements in the same group have similar chemical properties because they have the same number of valence electrons, which determine their chemical behavior.

Which of the following are considered metalloids? (Select all that apply)

A. Silicon ✓

B. Germanium ✓

C. Arsenic ✓

D. Tin

What is the symbol for the element Oxygen?

A. O ✓

B. Ox

C. Oy

D. Om

Which group contains the alkali metals?

A. Group 1 ✓

B. Group 2

C. Group 17

D. Group 18

Which elements are in the same period as Sodium? (Select all that apply)

A. Magnesium ✓

B. Aluminum ✓

C. Silicon ✓

D. Argon ✓