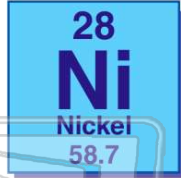




Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

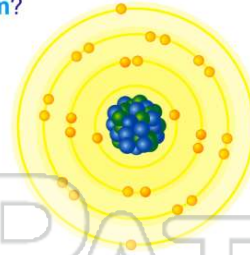
1 What is the **total number of sublevels** that contain electrons in the third principal energy level of a **nickel atom** in the ground state?

- A 1
- B 2
- C 3
- D 4



2 What is the **nuclear charge** of an **iron atom**?

- A +26
- B +30
- C +56
- D +82



3 Which electron configuration represents an element with the **highest first ionization energy**?

- A  $1s^22s^1$
- B  $1s^22s^2$
- C  $1s^22s^22p^63s^1$

4 An atom of oxygen is in an **excited state**. When an electron in this atom moves from the **third shell to the second shell**, **energy** is

- A emitted by the nucleus
- B emitted by the electron
- C absorbed by the nucleus

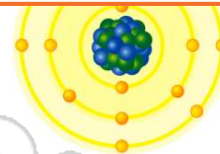


## PREVIEW

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7 C remains the same

- B 2-7-8
- C 2-8-7
- D 2-8-8



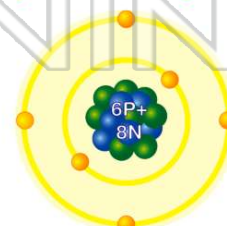
9 An atom of **fluorine** has a mass of **19 atomic mass units**. The total number of protons and neutrons in its nucleus is

- A 9
- B 10
- C 19
- D 28



10 What is the **atomic number** of an element that has **six protons** and **eight neutrons**?

- A 6
- B 2
- C 8
- D 14

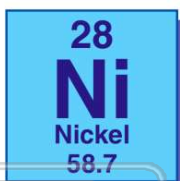




## ANSWER KEY

What is the **total number of sublevels** that contain electrons in the third principal energy level of a **nickel atom** in the ground state?

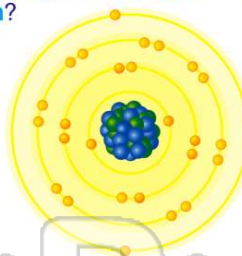
- A 1
- B 2
- C 3
- D 4



(C)

What is the **nuclear charge** of an **iron atom**?

- A +26
- B +30
- C +56
- D +82



(a)

Which electron configuration represents an element with the **highest first ionization energy**?

- A  $1s^22s^1$
- B  $1s^22s^2$
- C  $1s^22s^22p^63s^1$
- D  $1s^22s^22p^63s^2$

(b)

An atom of oxygen is in an **excited state**. When an electron in this atom moves from the **third shell to the second shell**, **energy** is

- A emitted by the nucleus
- B emitted by the electron
- C absorbed by the nucleus
- D absorbed by the electron

(b)



## PREVIEW

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An atom of **fluorine** has a mass of **19 atomic mass units**. The total number of protons and neutrons in its nucleus is

- A 9
- B 10
- C 19
- D 28

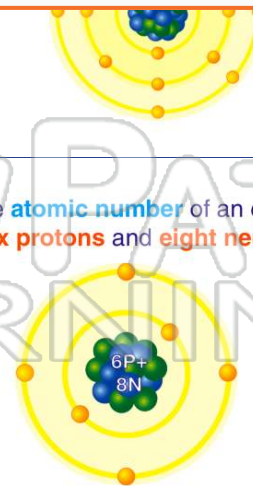


(C)

- C 2-8-7
- D 2-8-8

What is the **atomic number** of an element that has **six protons** and **eight neutrons**?

- A 6
- B 2
- C 8
- D 14



(a)