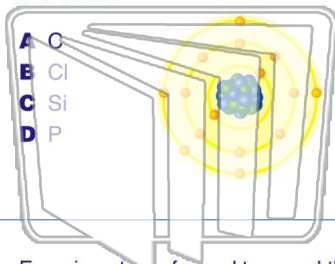




Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1

Which atom in the ground state has **five electrons** in its outer level and **ten electrons** in its kernel?



2

When an atom **loses an electron**, the atom becomes an ion that is

- A positively charged and gains a small amount of mass
- B positively charged and loses a small amount of mass
- C negatively charged and gains a small amount of mass
- D negatively charged and loses a small amount of mass

3

Experiments performed to reveal the **structure of atoms** led scientists to conclude that an atom's

4

Which pair of atoms is held together by a **covalent bond**?

A HCl

5

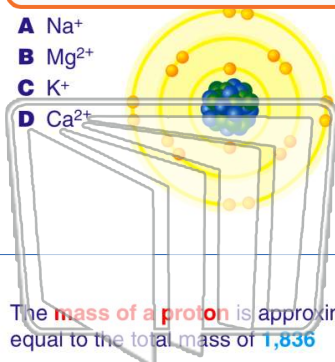


## PREVIEW

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7

- A Na<sup>+</sup>
- B Mg<sup>2+</sup>
- C K<sup>+</sup>
- D Ca<sup>2+</sup>

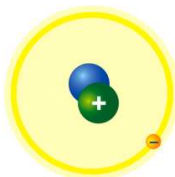


- A decreases
- B increases
- C remains the same

9

The **mass of a proton** is approximately equal to the total mass of **1,836**

- A electrons
- B neutrons
- C helium nuclei
- D alpha particles



10

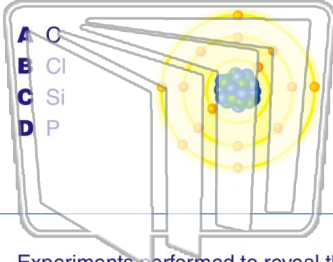
A carbon-14 atom **spontaneously decayed** to form a nitrogen-14 atom. This change took place because

- A a transmutation occurred without particle emission
- B a transmutation occurred with particle emission
- C nitrogen-14 has an unstable nucleus
- D carbon-14 has a stable nucleus



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

- 1 Which atom in the ground state has **five electrons** in its outer level and **ten electrons** in its kernel?



- 2 When an atom **loses an electron**, the atom becomes an ion that is

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- 3 Experiments performed to reveal the **structure of atoms** led scientists to conclude that an atom's

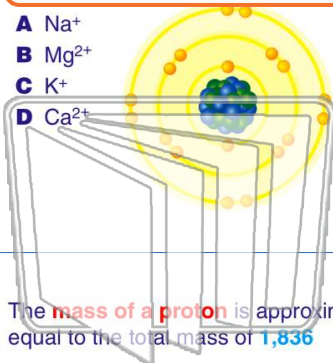
- 4 Which pair of atoms is held together by a **covalent bond**?

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## PREVIEW

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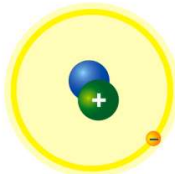
- 7
- A  $\text{Na}^+$
  - B  $\text{Mg}^{2+}$
  - C  $\text{K}^+$
  - D  $\text{Ca}^{2+}$



- A decreases
- B increases
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- 9 The **mass of a proton** is approximately equal to the total mass of **1,836**

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- B neutrons
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- 10 A carbon-14 atom **spontaneously decayed** to form a nitrogen-14 atom. This change took place because

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