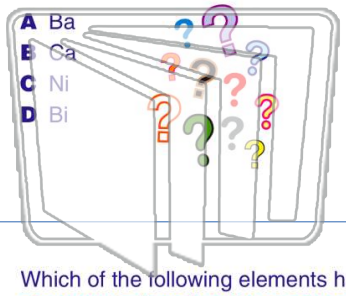
Elements - Set I

CHEM

Name_____ Class_____ Date_____

1 An aqueous solution of XCl_2 contains colored ions. Element **X** could be

A Ba
B Ca
C Ni
D Bi



2 Which statement describes a **chemical property** of oxygen?

A Oxygen has a melting point of 55 K.
B Oxygen can combine with a metal to produce a compound.
C Oxygen gas is slightly soluble in water.
D Oxygen gas can be compressed.

3 Which of the following elements has the **strongest attraction** for electrons?

4 Which elements are both classified as **metalloids**?

7 compound that would exhibit the **strongest hydrogen bonding**?

A selenium
B tellurium
C oxygen
D sulfur

A bismuth
B helium
C silver
D tellurium

9 Atoms of which set of elements all exhibit the **same** oxidation state?

A actinoid series
B metalloids
C alkaline earth metals
D transition metals

10 Given the reactions:

$2X(s) + 2H_2O(l) \rightarrow 2X^+(aq) + 2OH^-(aq) + H_2(g)$
$2Y(s) + 2H_2O(l) \rightarrow 2Y^+(aq) + 2OH^-(aq) + H_2(g)$

The unknowns, **X** and **Y**, are most likely

A metallic elements in the same group
B metallic elements in the same period
C nonmetallic elements in the same group
D nonmetallic elements in the same period

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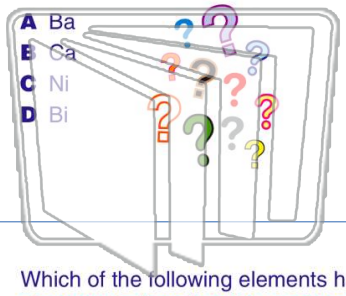

C

2 Which statement describes a **chemical property** of oxygen?

A Oxygen has a melting point of 55 K.
B Oxygen can combine with a metal to produce a compound.
C Oxygen gas is slightly soluble in water.
D Oxygen gas can be compressed.

B

3 Which of the following elements has the **strongest attraction** for electrons?

A boron

4 Which elements are both classified as **metalloids**?

A Ge and As

A

5

C

7 compound that would exhibit the **strongest hydrogen bonding**?

A selenium
B tellurium
C oxygen
D sulfur

C

A bismuth
B helium
C silver
D tellurium

D

9 Atoms of which set of elements all exhibit the **same** oxidation state?

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C

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A