From Structures to Properties — Practice Test

Newfoundland and Labrador Chemistry 2202 • 10 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Think about the property. Compared with a single bond, a triple bond between the same atoms is generally**

- A weaker and longer
- B stronger and shorter
- C weaker and shorter
- D stronger and longer

Understand It with Pulse | Flag a mistake

2 **Recall the property. The shape of ammonia, NH_3, is**

A tetrahedral

B bent

C trigonal pyramidal

D linear

Understand It with Pulse | Flag a mistake

3 **Apply the property. A carbon atom has how many valence electrons?**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Consider the property in general. A sodium atom loses how many electrons to form a sodium ion, Na plus?**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Review the property. An ionic bond forms by**

- A sharing electrons equally
- B transfer of electrons between atoms
- C sharing electrons unequally only
- D pooling electrons in a metal only

Understand It with Pulse | Flag a mistake

6 **Think about the statement. A covalent bond forms by**

- A transfer of electrons only
- B attraction between ions only
- C sharing electrons between atoms
- D breaking all bonds

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7 **Recall the statement. The shape of a water molecule is**

- A linear
- B tetrahedral
- C trigonal planar
- D bent

Understand It with Pulse | Flag a mistake

8 **Apply the statement. The shape of methane, CH_4, is**

- A tetrahedral
- B linear
- C bent
- D square planar

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9 **Consider the statement in general. The shape of carbon dioxide, CO_2, is**

A bent

B linear

C tetrahedral

D trigonal pyramidal

Understand It with Pulse | Flag a mistake

10 **Review the statement. Water is a polar molecule mainly because**

A it is linear

B it has no lone pairs

C it is bent and oxygen attracts electrons more strongly

D hydrogen is more electronegative than oxygen

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	B	**5.**	B	**9.**	B
2.	C	**6.**	C	**10.**	C
3.	4	**7.**	D		
4.	1	**8.**	A		

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