

HW11 - Intermolecular Forces

ⓘ This is a preview of the published version of the quiz

Started: Oct 21 at 11:22am

Quiz Instructions

Homework 11 - Intermolecular Forces

Question 1

2 pts

Forces between particles (atoms, molecules, or ions) of a substance are called...

- intramolecular forces.
- armed forces.
- intermolecular forces.
- None of these.

Question 2

3 pts

What would be the most significant type of intermolecular forces in a liquid sample of fluoroform (CHF_3)?

- hydrogen bonding
- dispersion
- covalent
- dipole-dipole
- ionic

Question 3

2 pts

What is the predominant intermolecular force between IBr molecules in liquid IBr?

- dispersion forces
- dipole forces
- hydrogen bonds
- ionic forces
- covalent bonds

Question 4

2 pts

Which of the following structures represents a possible hydrogen bond?

- Br-H Br
- Cl-H Cl
- F-H F
- C-H O

Question 5

2 pts

Identify the kinds of intermolecular forces that might arise between molecules of N_2H_4 .

- hydrogen bonding
- London forces
- London forces, dipole-dipole, and hydrogen bonding
- dipole-dipole
- London forces, dipole-dipole

Question 6

2 pts

The dominant forces between molecules are...

- electrostatic.
- electrodynamic.
- electromagnetic.
- magnetic.
- gravitational.

Question 7

3 pts

Which of the following molecules are likely to form hydrogen bonds?

1. CH_3CH_2OH
2. CH_3COOH
3. CH_3CHO
4. CH_3OCH_3

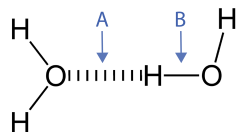
- 1, 2, 3, and 4
- 1 only
- 1 and 2 only

- None of these form hydrogen bonds.
- 1, 2, and 3

Question 8

3 pts

Consider the two water molecules below.



Which of the following statements is correct?

- The covalent bond A is stronger than the hydrogen bond B.
- The covalent bond B is stronger than the hydrogen bond A.
- The covalent bond B is weaker than the hydrogen bond A.
- The covalent bond A is weaker than the hydrogen bond B.

Question 9

2 pts

Which of the following is not correctly paired with its dominant type of intermolecular forces?

- CaO, ionic forces
- C₆H₆ (benzene), instantaneous dipoles
- NH₃, hydrogen bonding
- HBr, hydrogen bonding
- SiH₄, instantaneous dipoles

Question 10

2 pts

Which of the following interactions is generally the strongest?

- dispersion forces
- dipole-dipole interactions
- hydrogen bonding
- ionic interactions

Question 11

2 pts

Which of the following statements is NOT correct?

Dispersion forces...

- are temporary rather than permanent dipole-dipole interactions.
- are also called London forces.
- are the only forces between nonpolar molecules.
- decrease in strength with increasing molecular size.

Question 12

3 pts

Why is I_2 a solid while H_2 is a gas?

- I_2 is less polarizable than H_2 .
- H_2 can perform hydrogen bonding.
- I_2 is more polarizable than H_2 .
- I_2 has a larger dipole than H_2 .

Question 13

2 pts

Very weak and very short range attractive forces between temporary (induced) dipoles are called...

- dispersion forces.
- gravitational forces.
- cohesive forces.
- adhesive forces.

Not saved

Submit Quiz