Dipole Attractions Worksheet

Scoring guide · one credit per question · review written work against each rubric

Dipole Attractions

Question 1

Choice (3)

Opposite partial charges attract.

Question 2

Chlorine attracts the shared electrons more strongly than hydrogen. This makes the chlorine end δ− and the hydrogen end δ+.

Question 3

Choice (2)

Like partial charges repel.

Question 4

An H–Cl bond is a shared electron pair within one molecule. An intermolecular attraction can occur between the δ+ end of one molecule and the δ− end of another.

Comparing Orientations in a Model

Question 5

Choice (1)

Only A places δ+ near δ−.

Question 6

Turn either molecule end for end so its δ− end faces the other molecule’s δ+ end.

Question 7

Choice (3)

Model B puts two δ+ ends together. Model C puts two δ− ends together.

Question 8

Molecules in a liquid are moving and rotating. Opposite ends favor attraction when nearby, while thermal motion means individual orientations can change.