

### Interatomic forces

The forces that hold the atoms together in a bond.

### Intermolecular forces

The forces that hold molecules together.

## INTERMOLECULAR FORCES

### INFLUENCE ON

#### State of molecules

Solid → gas

strength of intermolecular forces decreases

#### Size of molecules



F



Cl



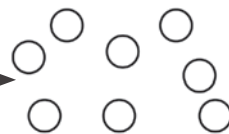
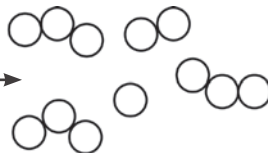
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strength of intermolecular forces decreases

#### Density



strength of intermolecular forces decreases

#### Boiling point and melting point

The stronger the forces, the more energy is needed to break them.

Stronger forces cause melting and boiling points to increase.

#### Viscosity

Indication of fluidity of a substance.

High viscosity, does not flow easily.

Influenced by intermolecular forces.

Molecules very long and polar: forces are larger and viscosity is higher.

Polarity: stronger attractive forces and long chains become tangled.

Temperature increases, viscosity decreases.