

calorimetry

the measurement of heat changes associated with chemical reactions and physical processes

cohesion

the attraction between the molecules of a liquid; it holds the particles of the liquid together

density

the mass of a substance divided by its volume; units are g/cm^3 ; i.e.. lead has a density of 11.3 g/cm^3

dilution

in terms of a solution; refers to the addition of water to a solution to decrease concentration; the number of moles of a solute is unchanged

dipole

the unequal charge distribution between two atoms so that the atoms of a bond have a δ^+ and a δ^-

dipole-dipole force	an attractive intermolecular force between the dipoles of neighbouring polar molecules
dispersion force	a weak attractive force between molecules due to the attraction between negative electrons of one molecule and the positive nucleus of another molecule
dissolution	the dissolving of a substance in a liquid
dynamic equilibrium	an equilibrium where molecules are undergoing the forward as well as the back reaction, at the same rate; e.g.. liquid water and water vapour in a sealed container
endothermic reaction	is where energy is absorbed from the surroundings

enthalpy (ΔH)

is the heat content of a system; the total of all the kinetic and potential energies for one mole of a substance

equilibrium

for a reversible reaction occurs when the rate of the forward reaction equals the rate of the back reaction

exothermic reaction

is where energy is released to the surroundings

hydrogen bonding

is the strongest of the intermolecular forces; the slightly positive charge on the hydrogen of one molecule is strongly attracted to the slightly negative charge on the F, O or N of another molecule

intermolecular forces

the forces between molecules; e.g.. dispersion forces, dipole-dipole forces and hydrogen bonding

joule

is the SI unit for energy,
such as heat

kelvin

the scientific temperature scale
with absolute zero as 0 K; a
change of one kelvin is the same
as a change of one degree
Celsius; $K = ^\circ C + 273$

molarity

the number of moles of
solute per litre of
solution

non-polar molecule

has no overall dipole; some molecules
are non-polar if they are symmetrical
so dipoles cancel, as in linear $O = C = O$;
elements such as O_2 are non-polar as
the atoms share the electrons equally
and there is no dipole

phase descriptors

or state symbols- (s), (l),
(aq), (g), -in equations
show the state of each
substance