

Exothermic processes	Endothermic processes
making ice cubes	melting ice cubes
formation of snow in clouds	conversion of frost to water vapor
condensation of rain from water vapor	evaporation of water
a candle flame	forming a cation from an atom in the gas phase
mixing sodium sulfite and bleach	baking bread
rusting iron	cooking an egg
burning sugar	producing sugar by photosynthesis
forming ion pairs	separating ion pairs
Combining atoms to make a molecule in the gas phase	splitting a gas molecule apart
mixing water and strong acids	mixing water and ammonium nitrate
mixing water with an anhydrous salt	making an anhydrous salt from a hydrate
crystallizing liquid salts (as in sodium acetate in chemical handwarmers)	melting solid salts
nuclear fission	reaction of barium hydroxide octahydrate crystals with dry ammonium chloride
mixing water with calcium chloride	reaction of thionyl chloride ( $\text{SOCl}_2$ ) with cobalt(II) sulfate heptahydrate