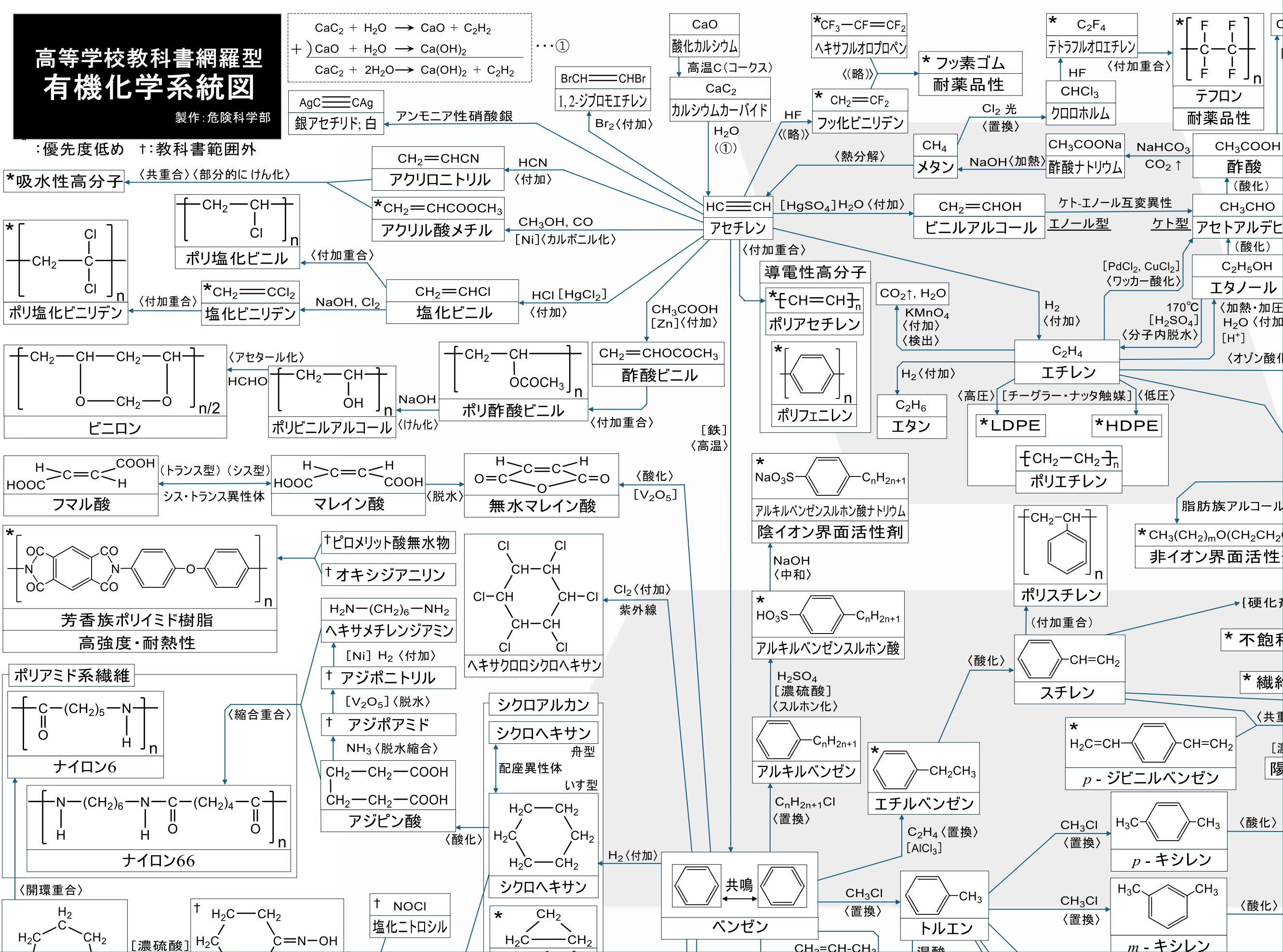
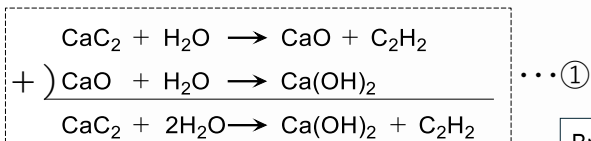
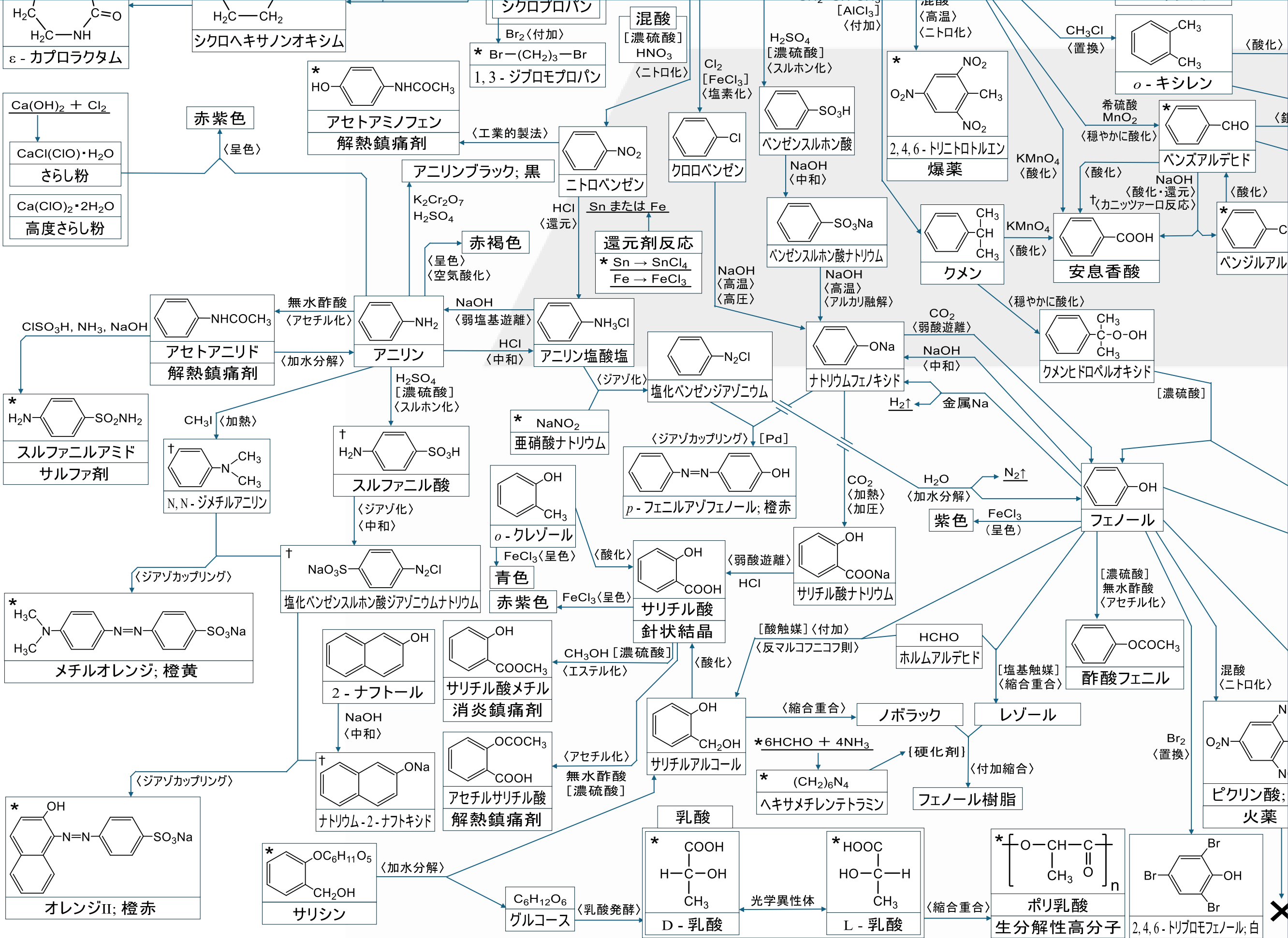


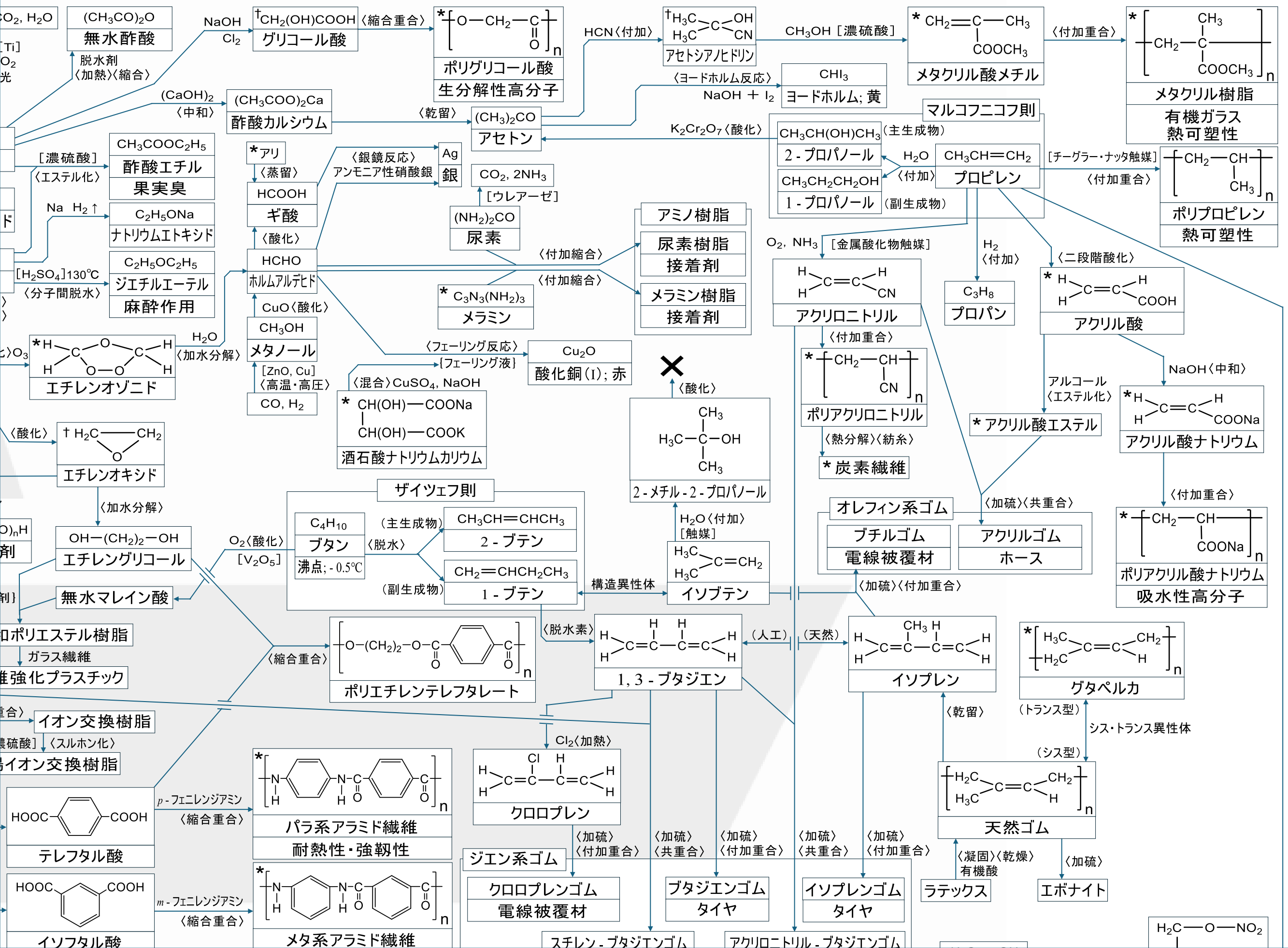
高等学校教科書網羅型 有機化学系統図

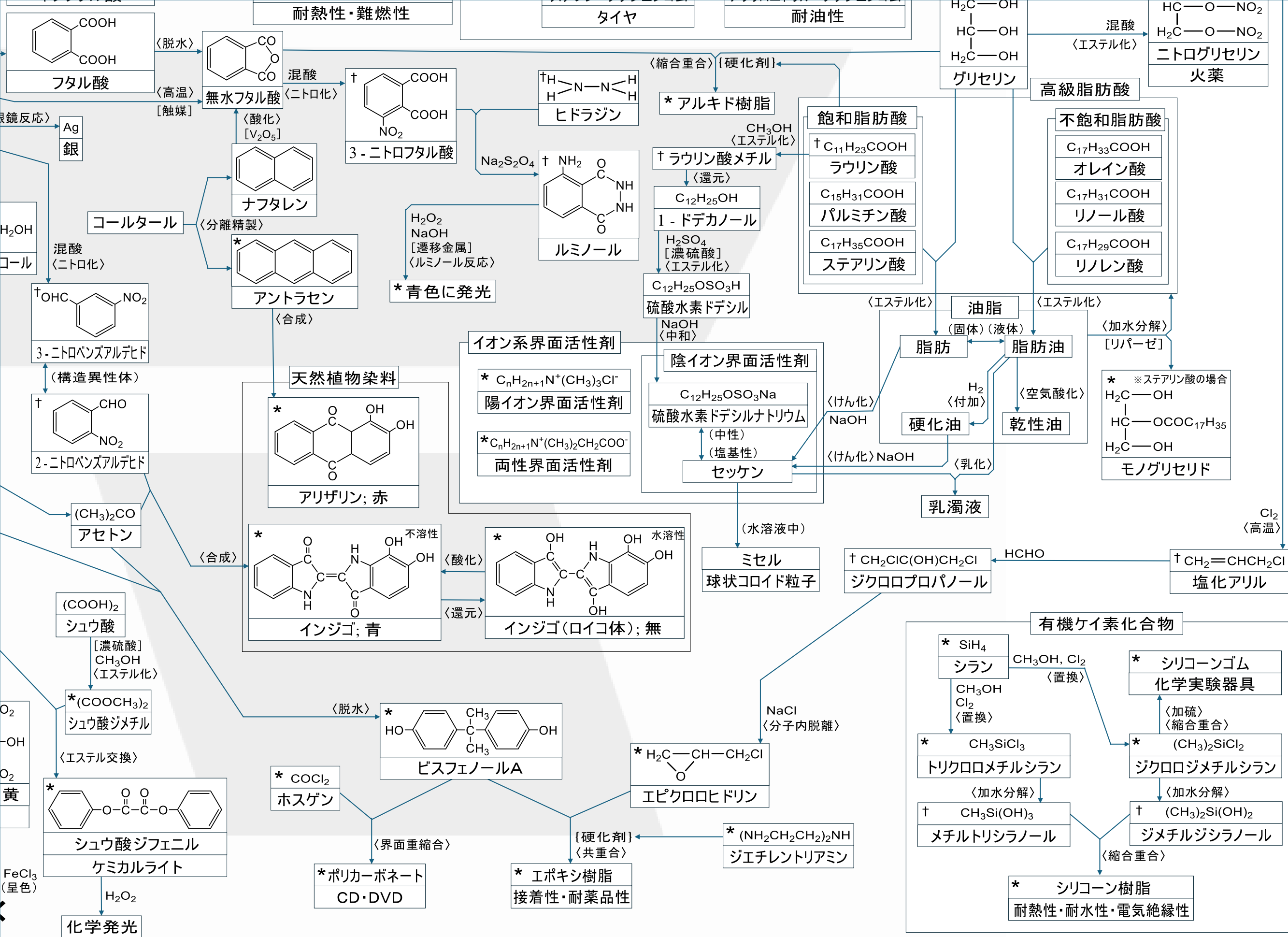
製作: 危険科学部

: 優先度低め †: 教科書範囲外



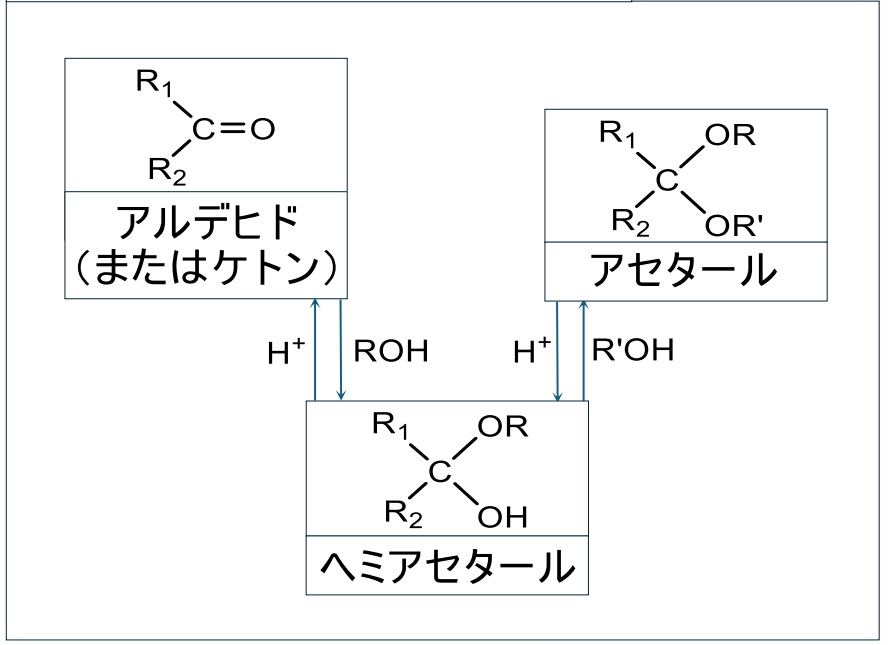




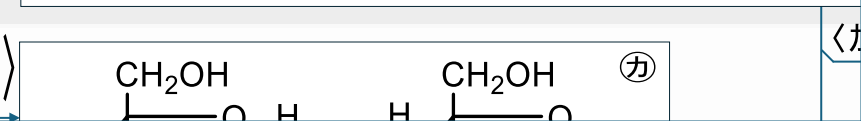
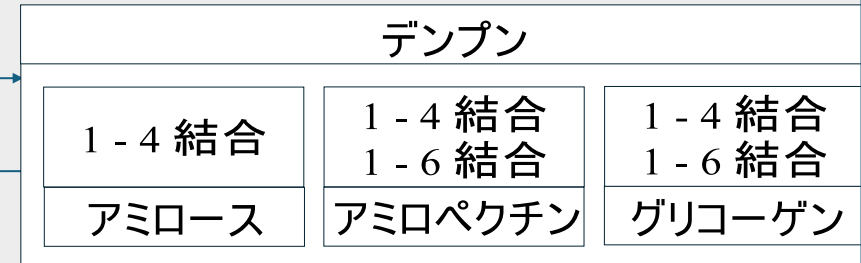
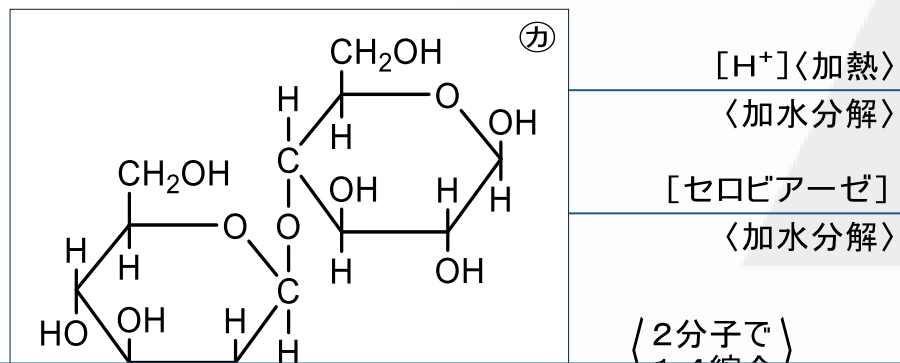
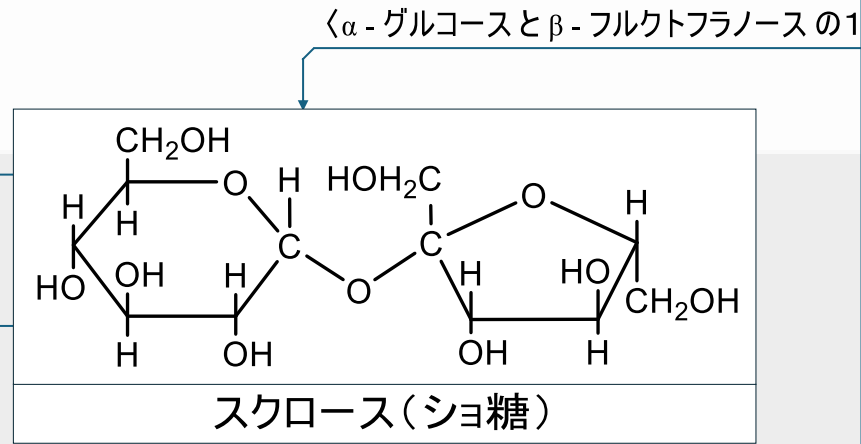
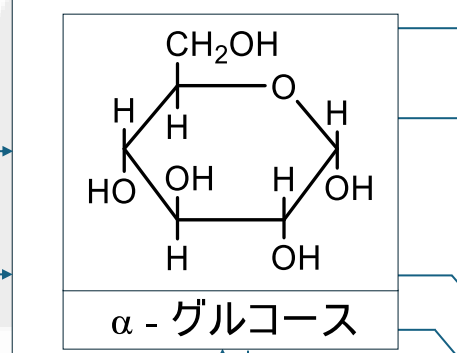
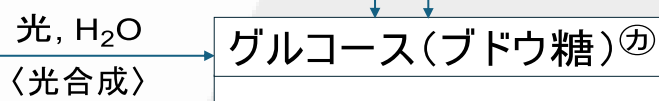
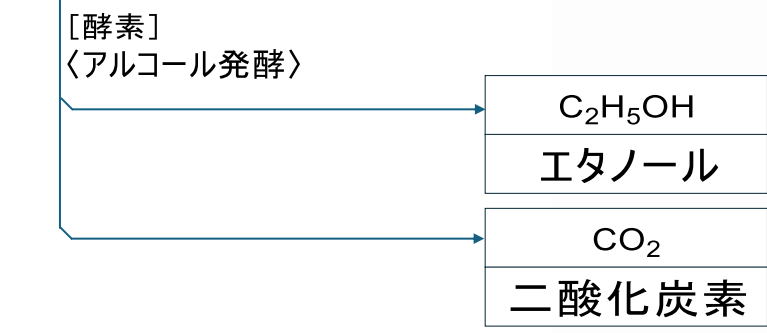
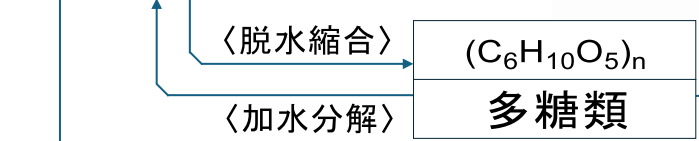
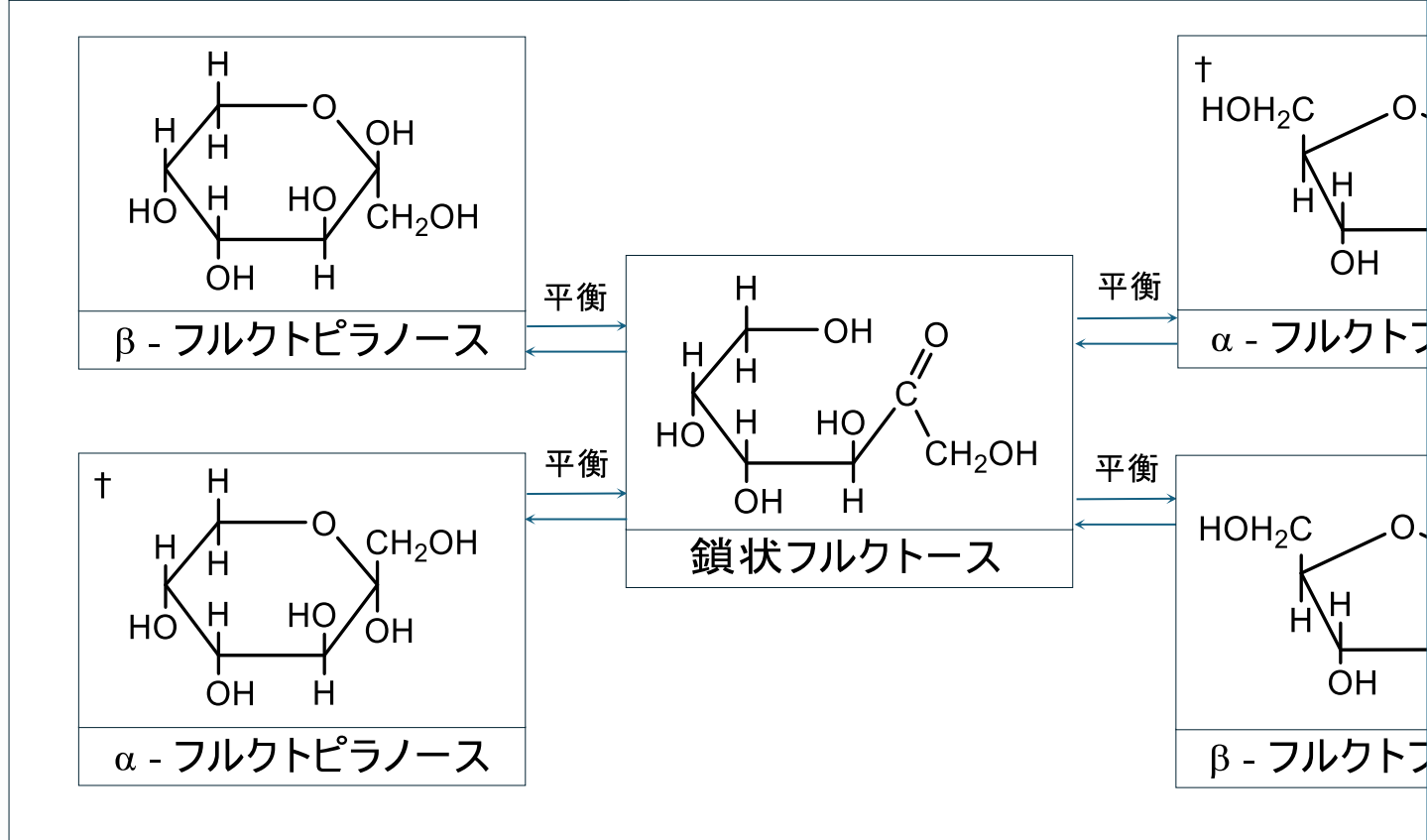


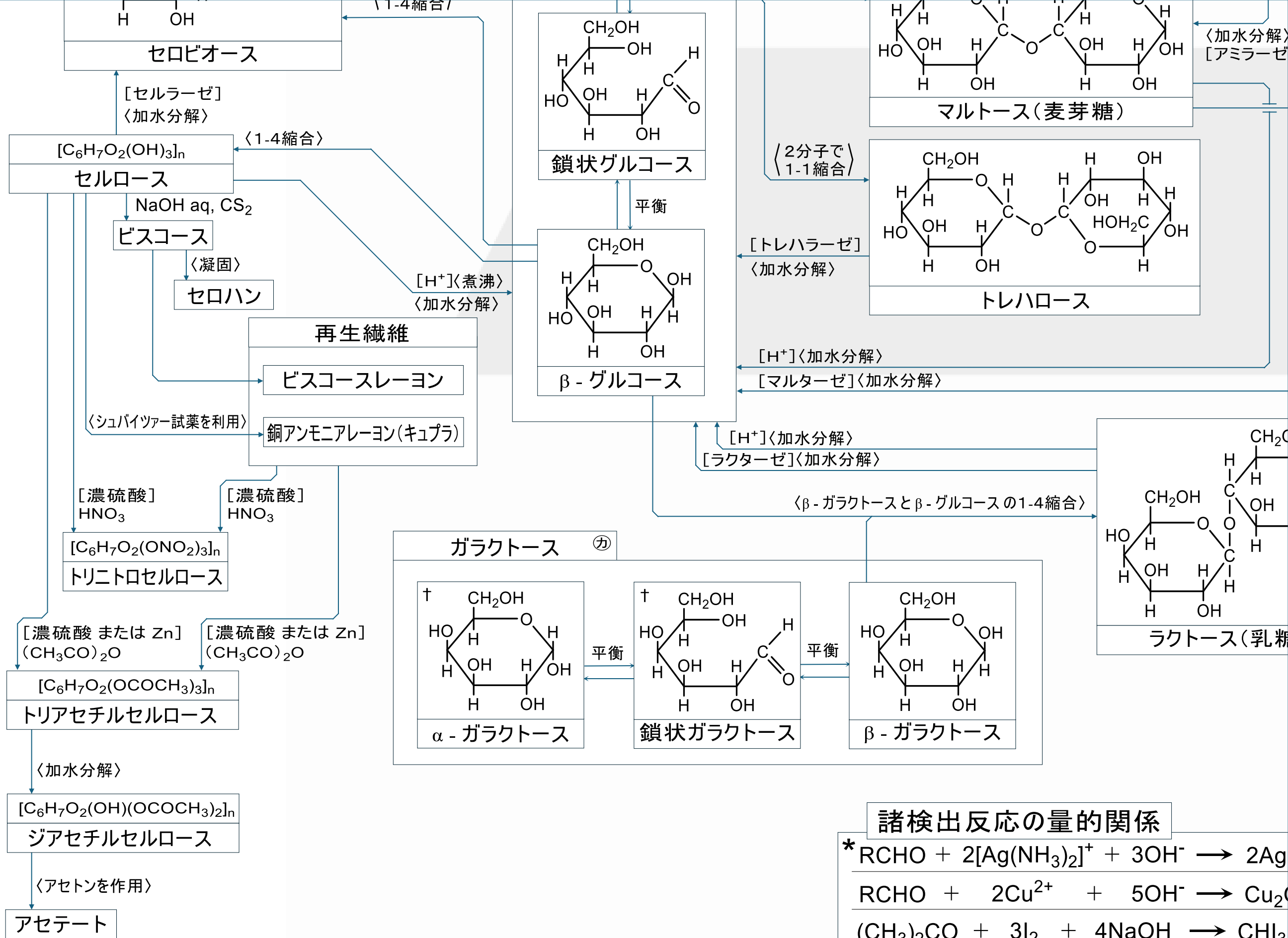
㉑:還元性をもつ [H

ヘミアセタール構造の平衡反応

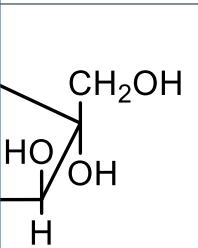


フルクトース(果糖) ㉑

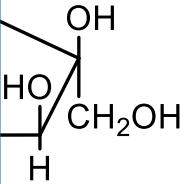




[H⁺] : 酸触媒



フラノース



フラノース

-2 縮合>

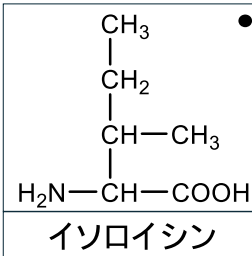
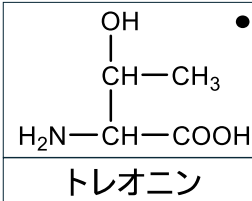
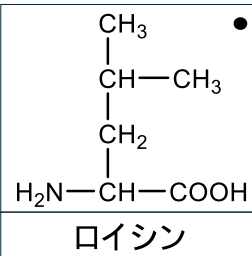
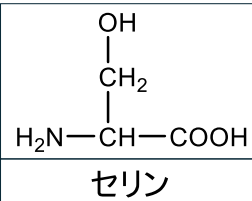
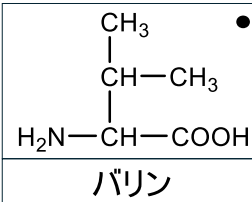
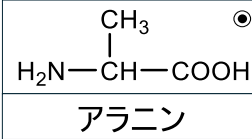
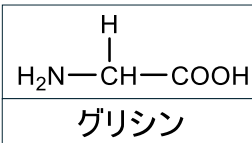
加水分解を途中で中止>

デキストリン

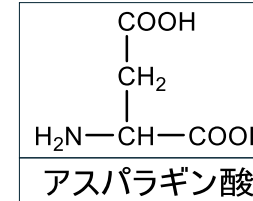
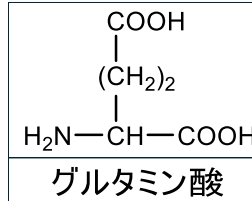
アミノ酸

● : 必須アミノ酸 ◎ : 準必須アミノ酸

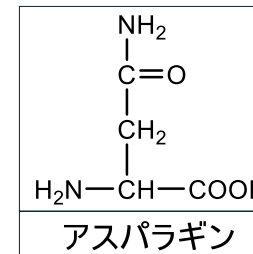
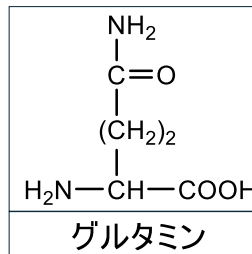
中性



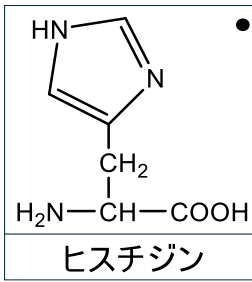
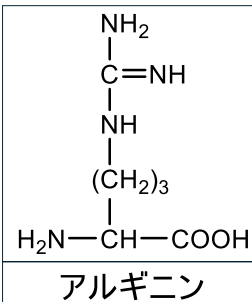
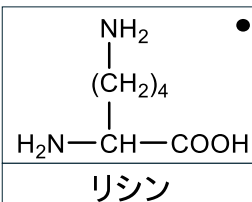
酸性



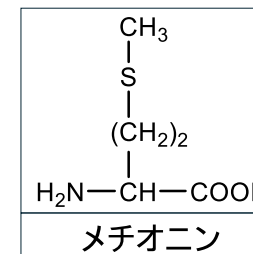
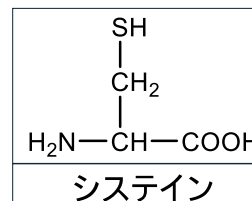
アミド結合を有する



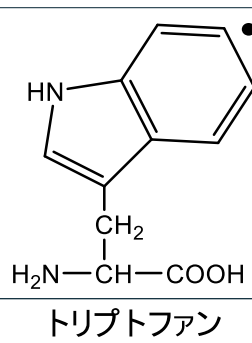
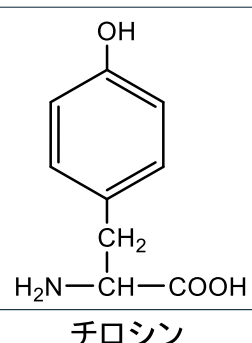
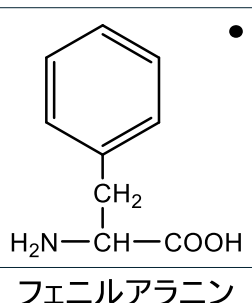
アミン塩基



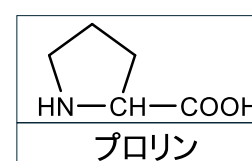
硫黄Sを含む



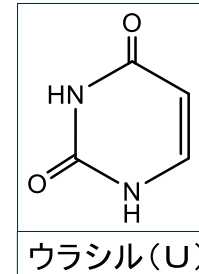
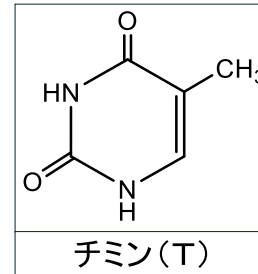
ベンゼン環を含む



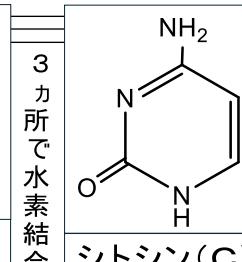
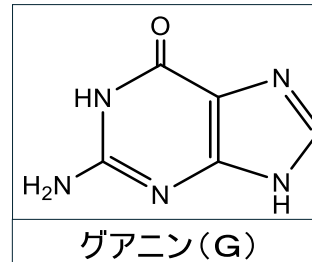
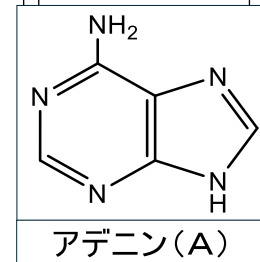
アミノ基が2級アミン



塩基

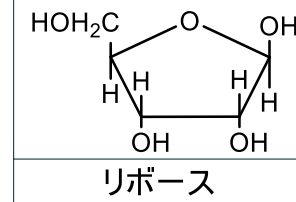
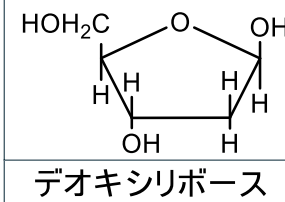


2カ所で水素結合

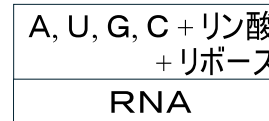


3カ所で水素結合

糖



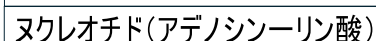
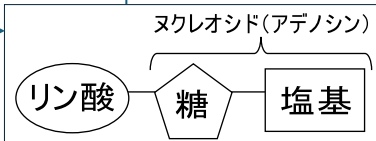
ポリヌクレオチド(核酸)



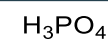
[DNAアーゼ]
〈加水分解〉

〈脱水縮合〉

†[RNAアーゼ]
〈加水分解〉



〈脱水縮合〉



濃硝酸
〈加熱〉

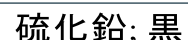
黄色

〈キサントプロテイン反応〉

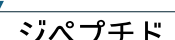
〈冷却し塩基性に〉

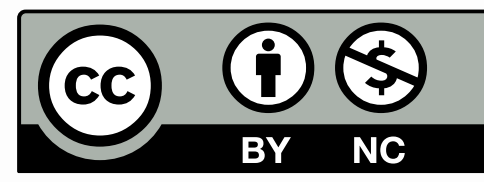
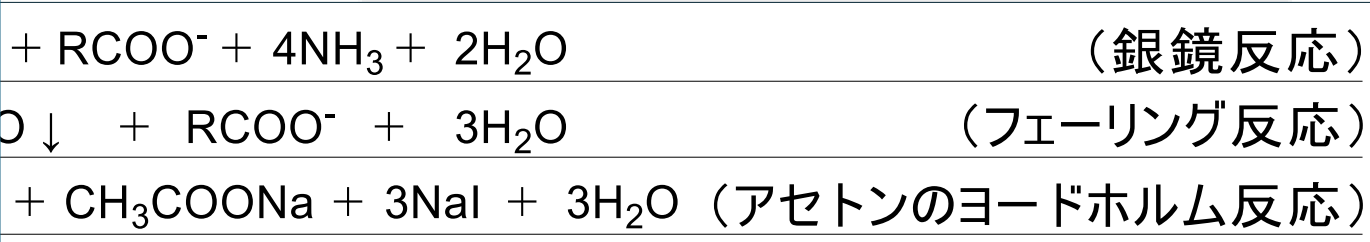
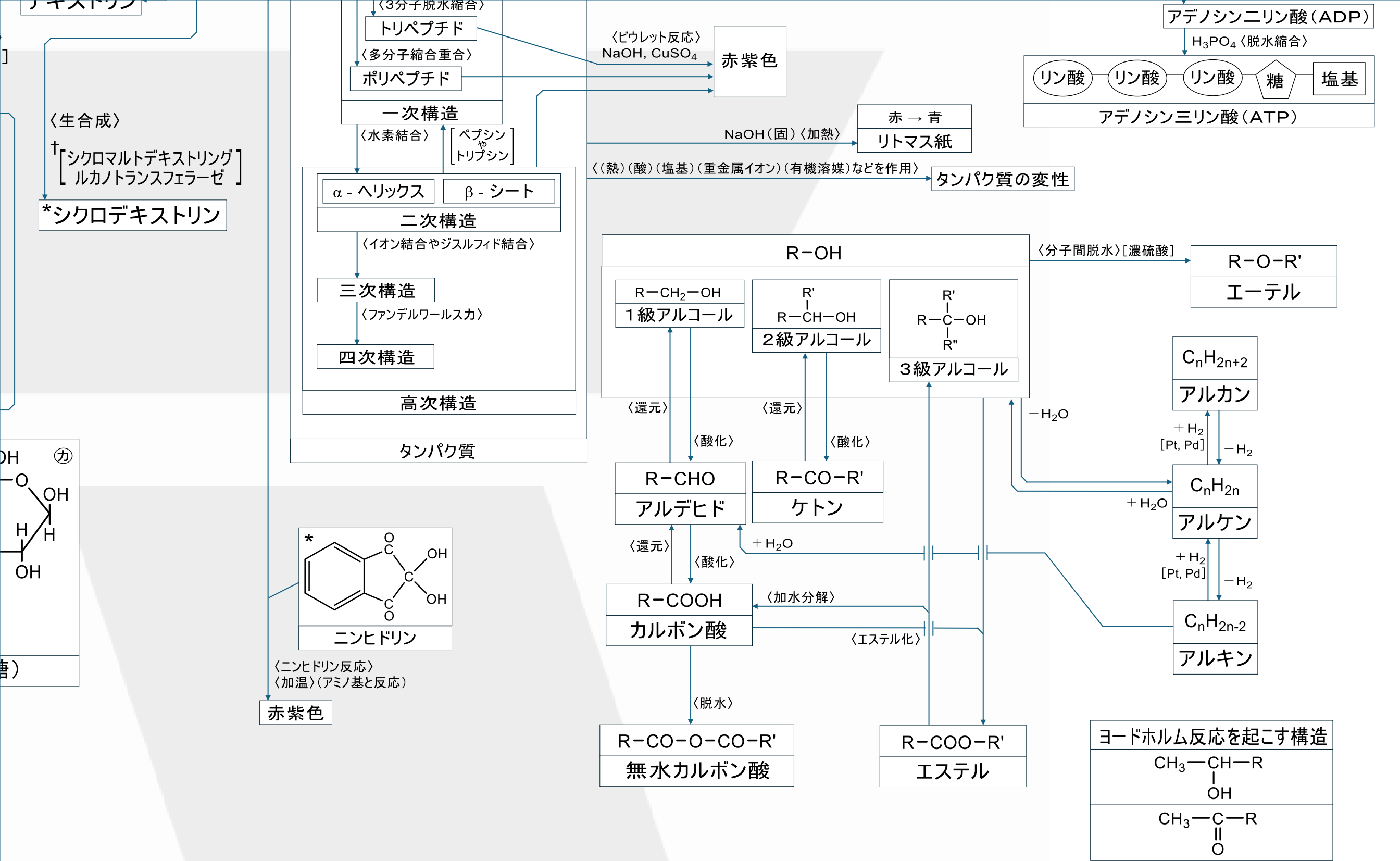
橙黄色

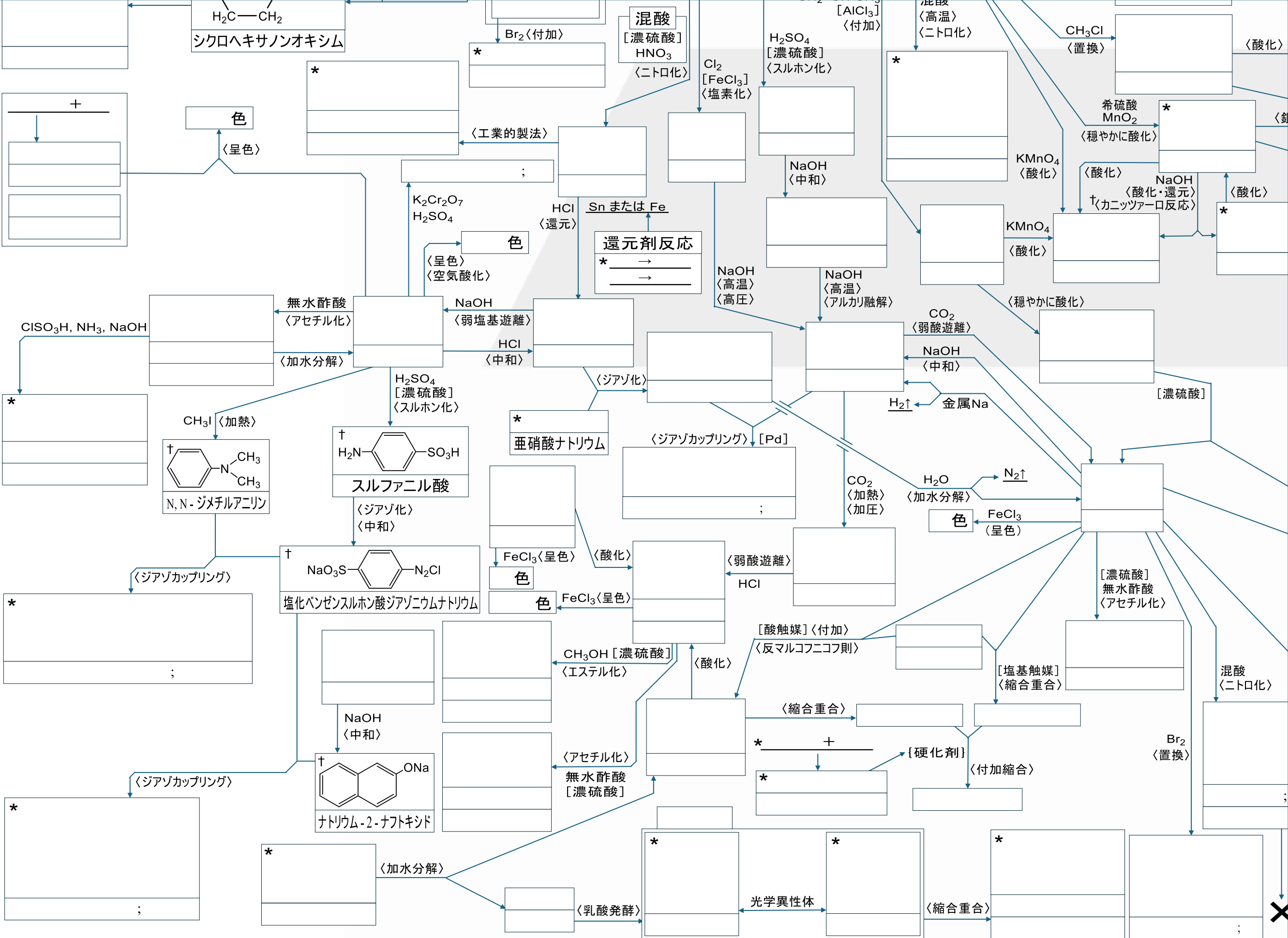
NaOH 〈加熱〉
(CH₃COO)₂Pb

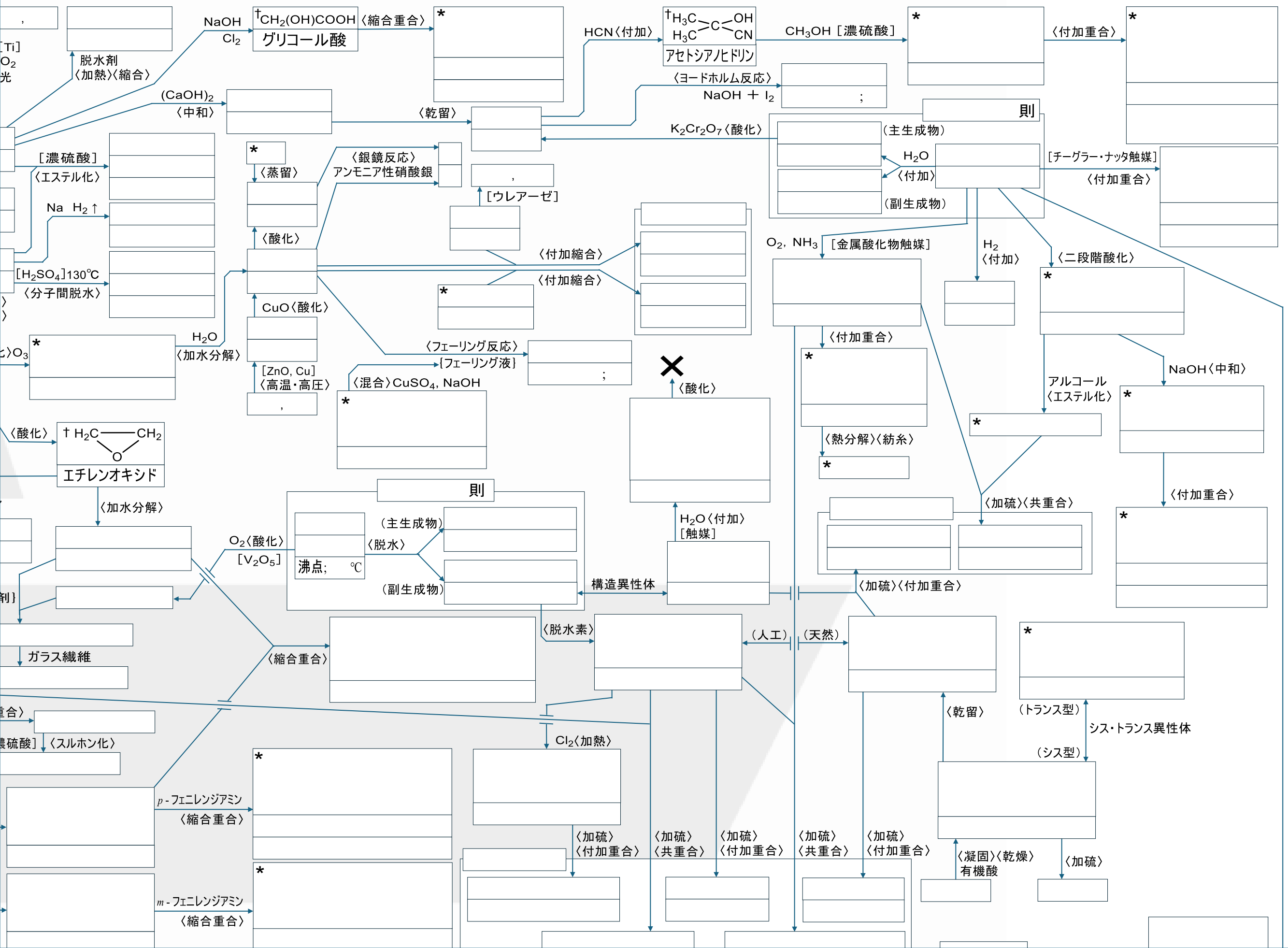


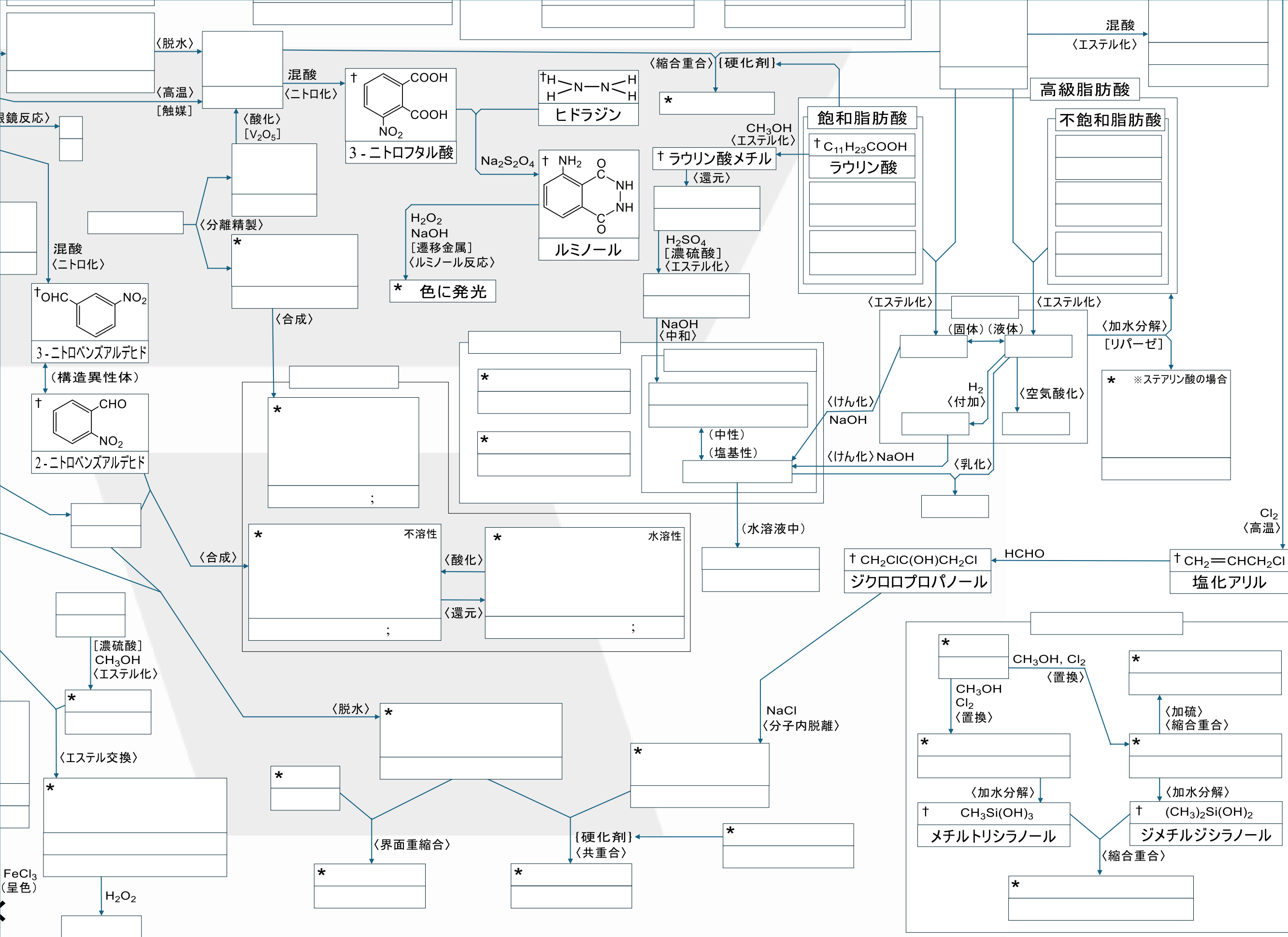
[ペプチダーゼ]
〈2分子脱水縮合〉



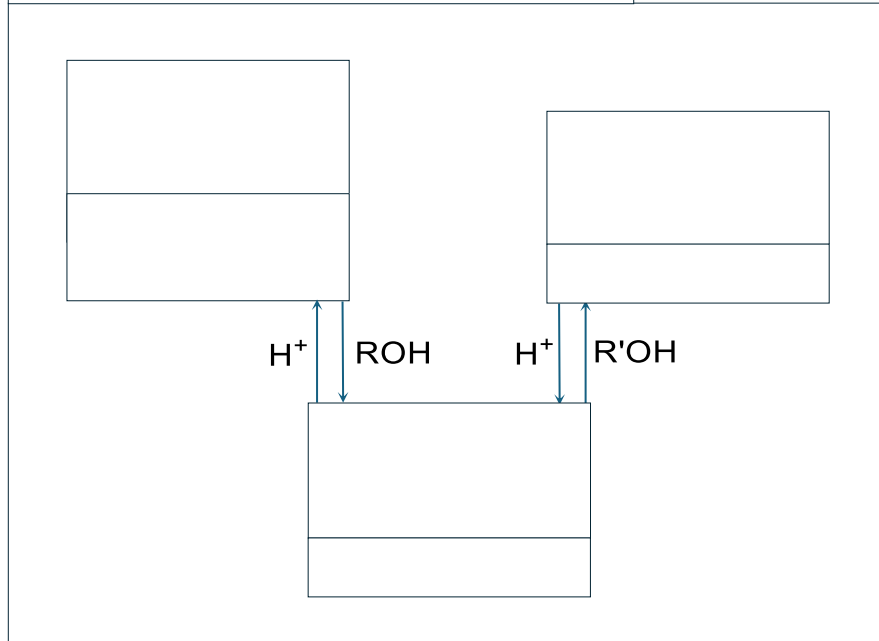




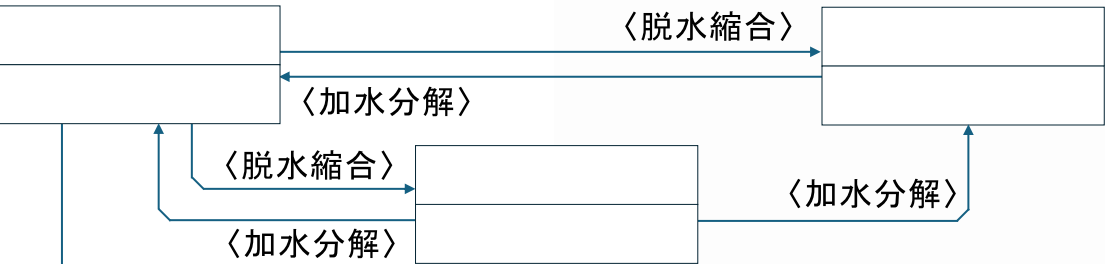
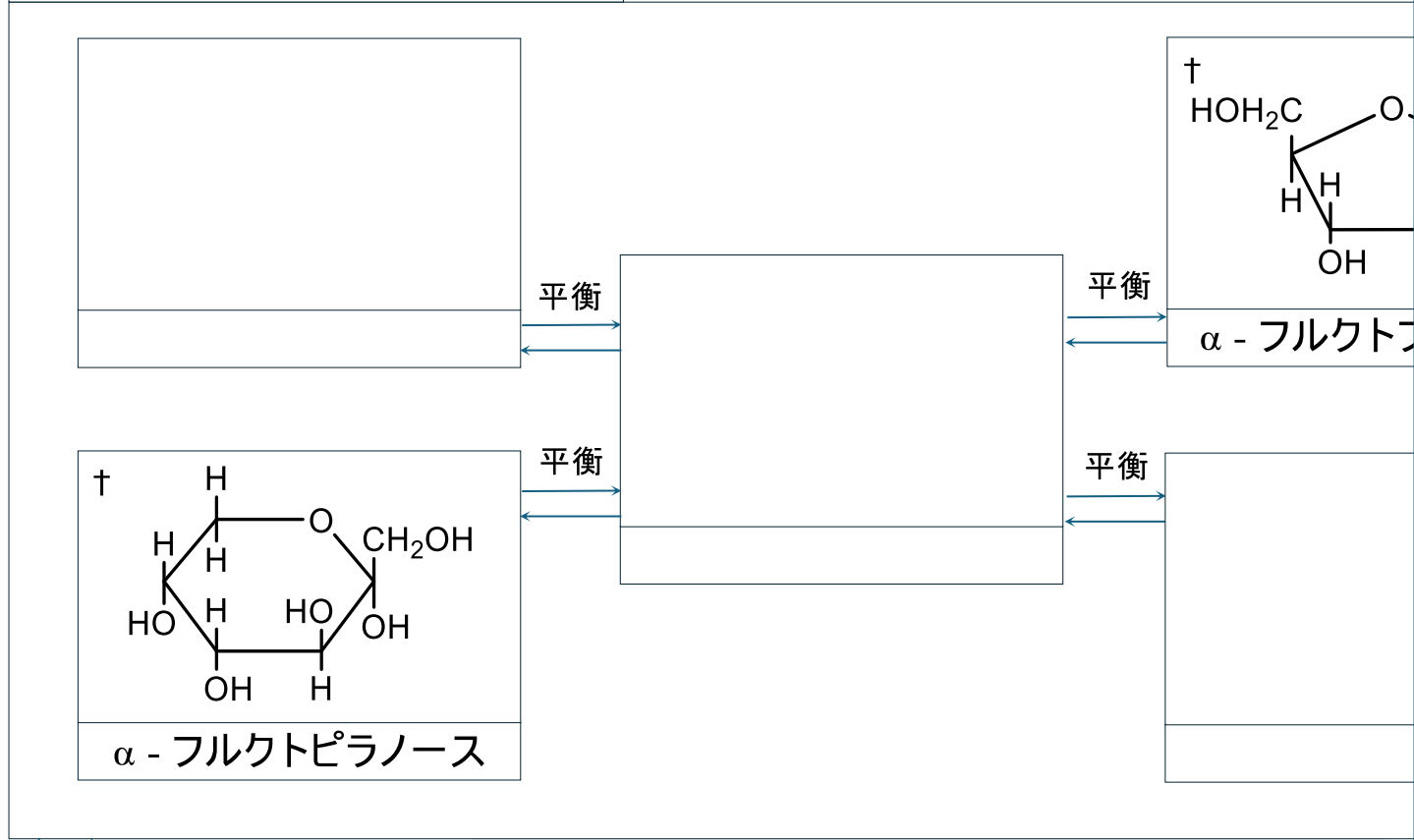




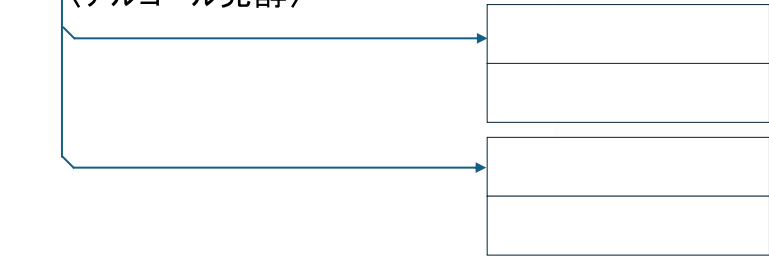
ヘミアセタール構造の平衡反応



①:還元性をもつ [H]

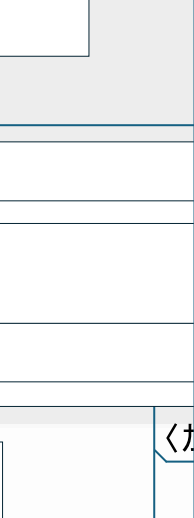
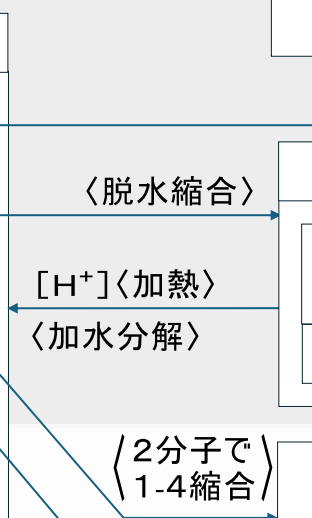
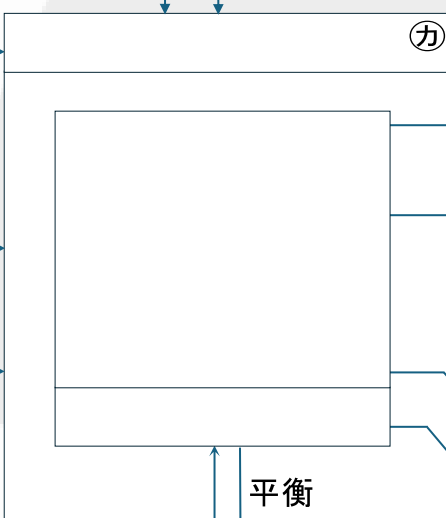


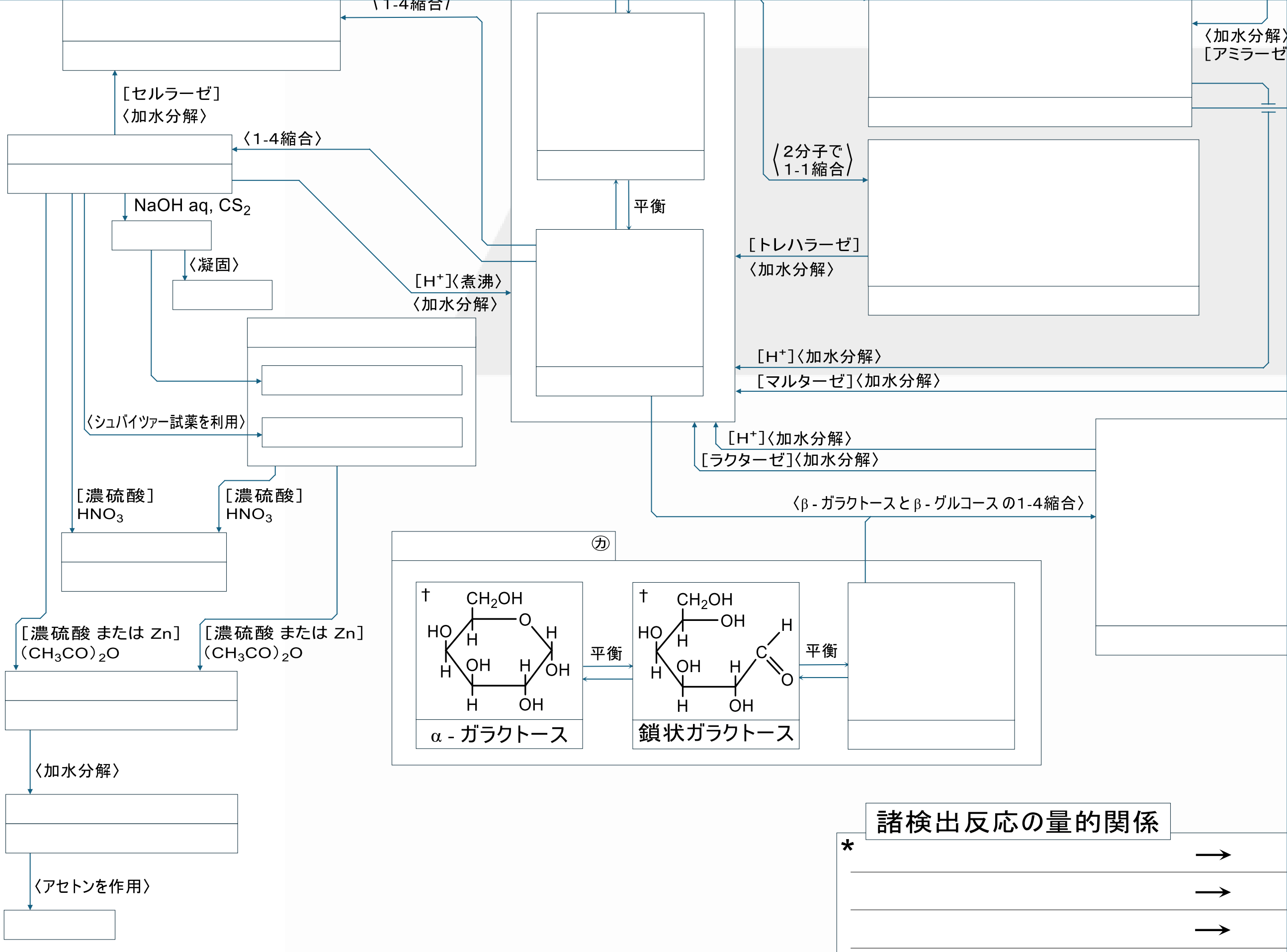
[酵素]
〈アルコール発酵〉



光, H_2O
〈光合成〉

①:還元性をもつ [H]





諸検出反応の量的関係

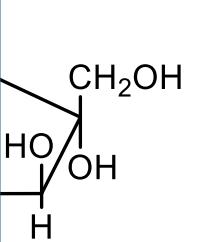
*

→

→

→

[H⁺] : 酸触媒



フラノース

-2 縮合>

加水分解を途中で中止>

アミノ酸

● : 必須アミノ酸 ◎ : 準必須アミノ酸

性

		●
◎		
	●	●
●		

性

を有する

を含む

	●

アミノ基が

を含む

●		●

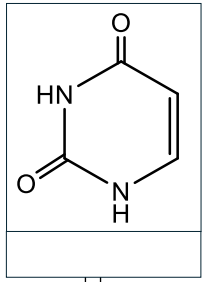
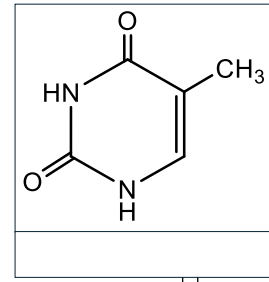
濃硝酸
〈加熱〉 〈キサントプロテイン反応〉

色 〈冷却し塩基性に〉 色

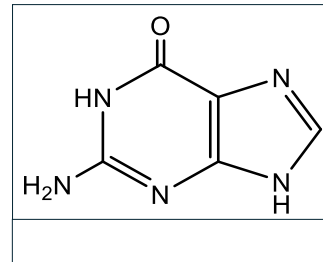
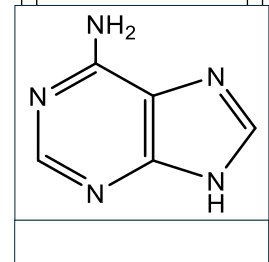
NaOH 〈加熱〉
(CH₃COO)₂Pb

;

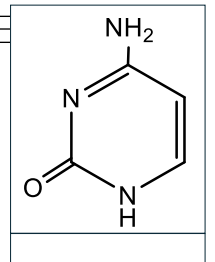
塩基



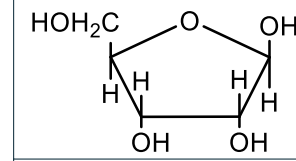
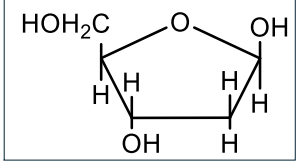
2カ所で水素結合



3カ所で水素結合



糖



DNA

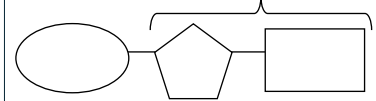
RNA

[DNAアーゼ]
〈加水分解〉

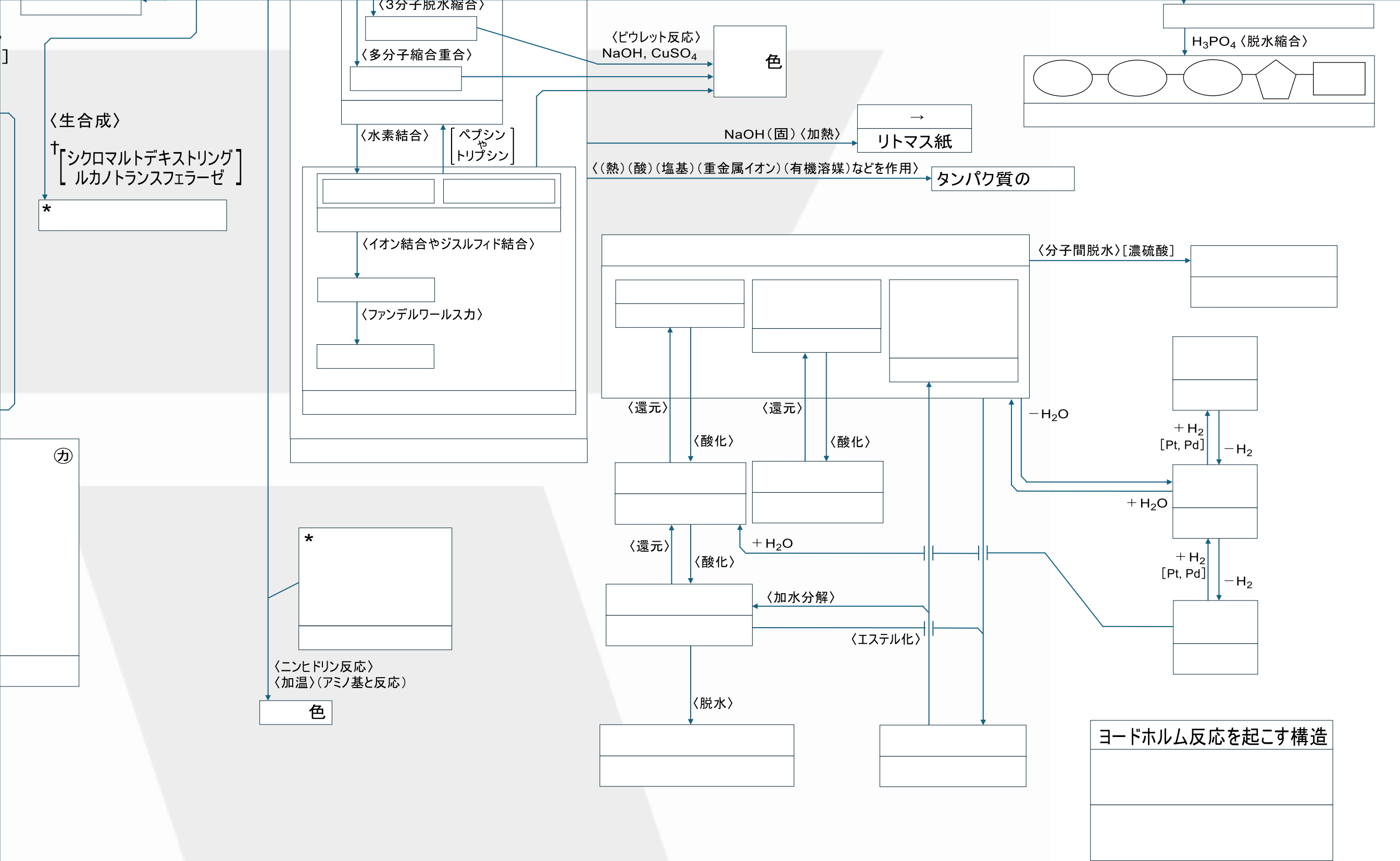
〈脱水縮合〉

†[RNAアーゼ]
〈加水分解〉

ヌクレオシド(アデノシン)



〈脱水縮合〉



(銀鏡反応)
(フェーリング反応)
(アセトンのヨードホルム反応)

