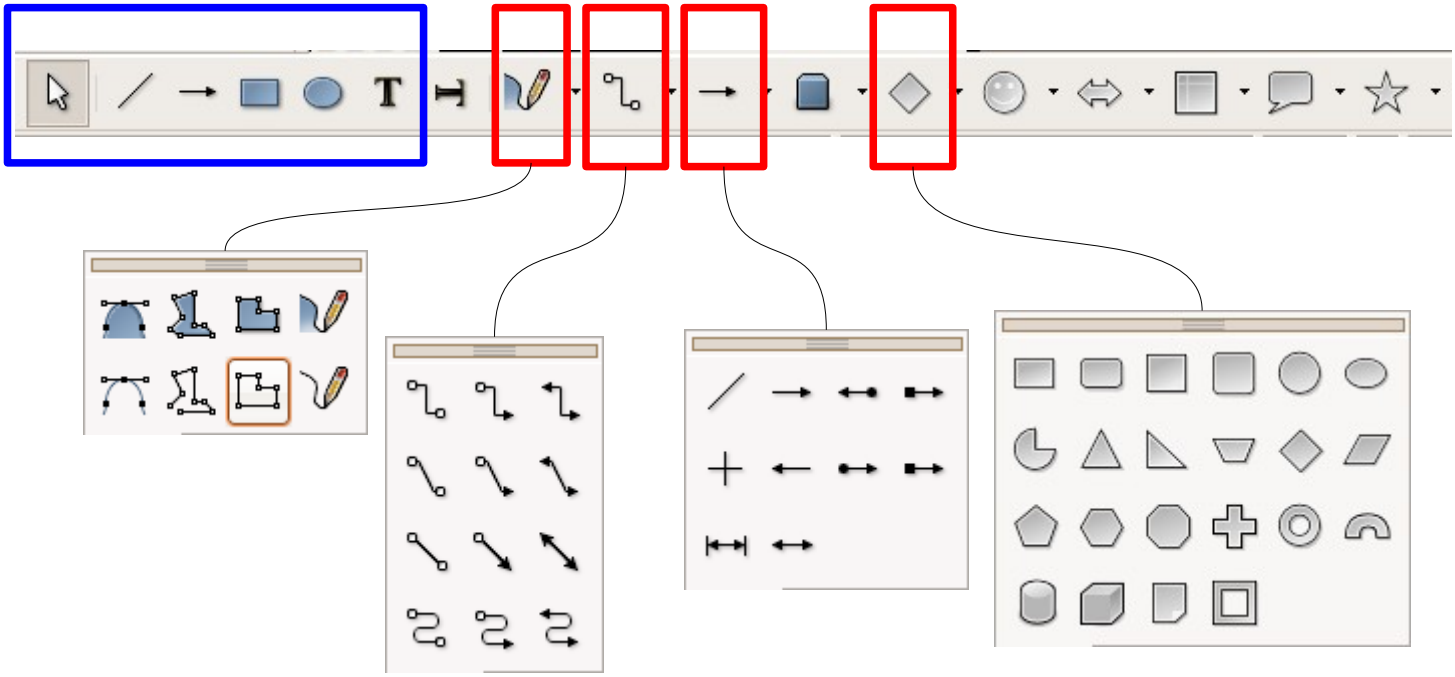
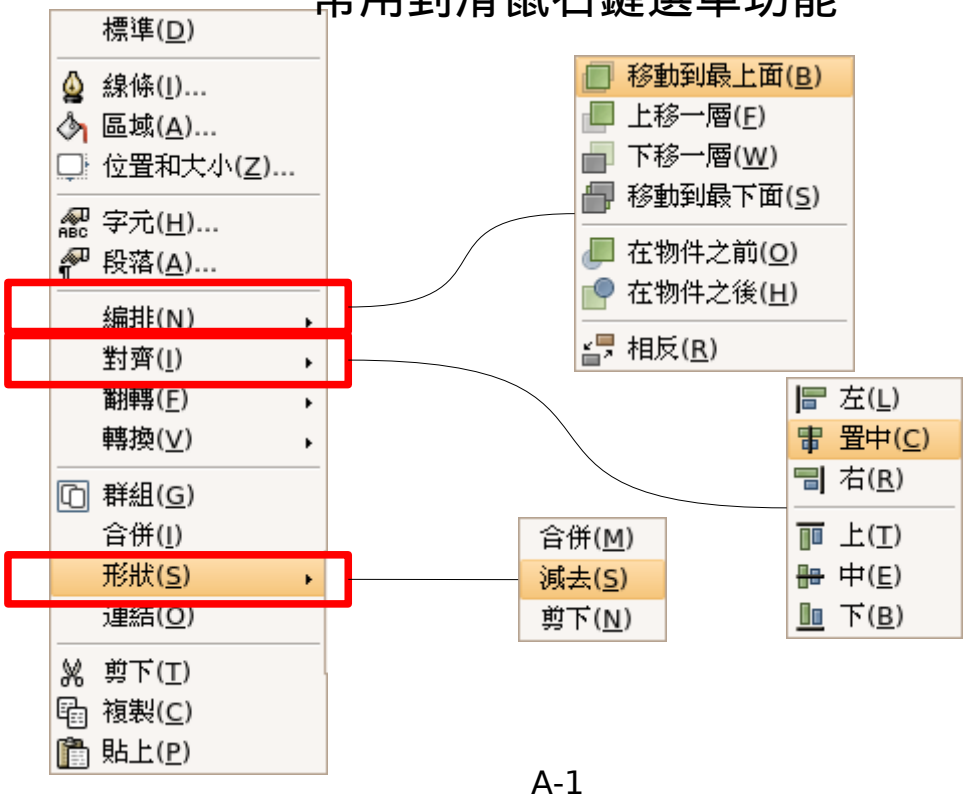
附錄 A ： OOo Draw 與化學圖形

化學實驗器材圖

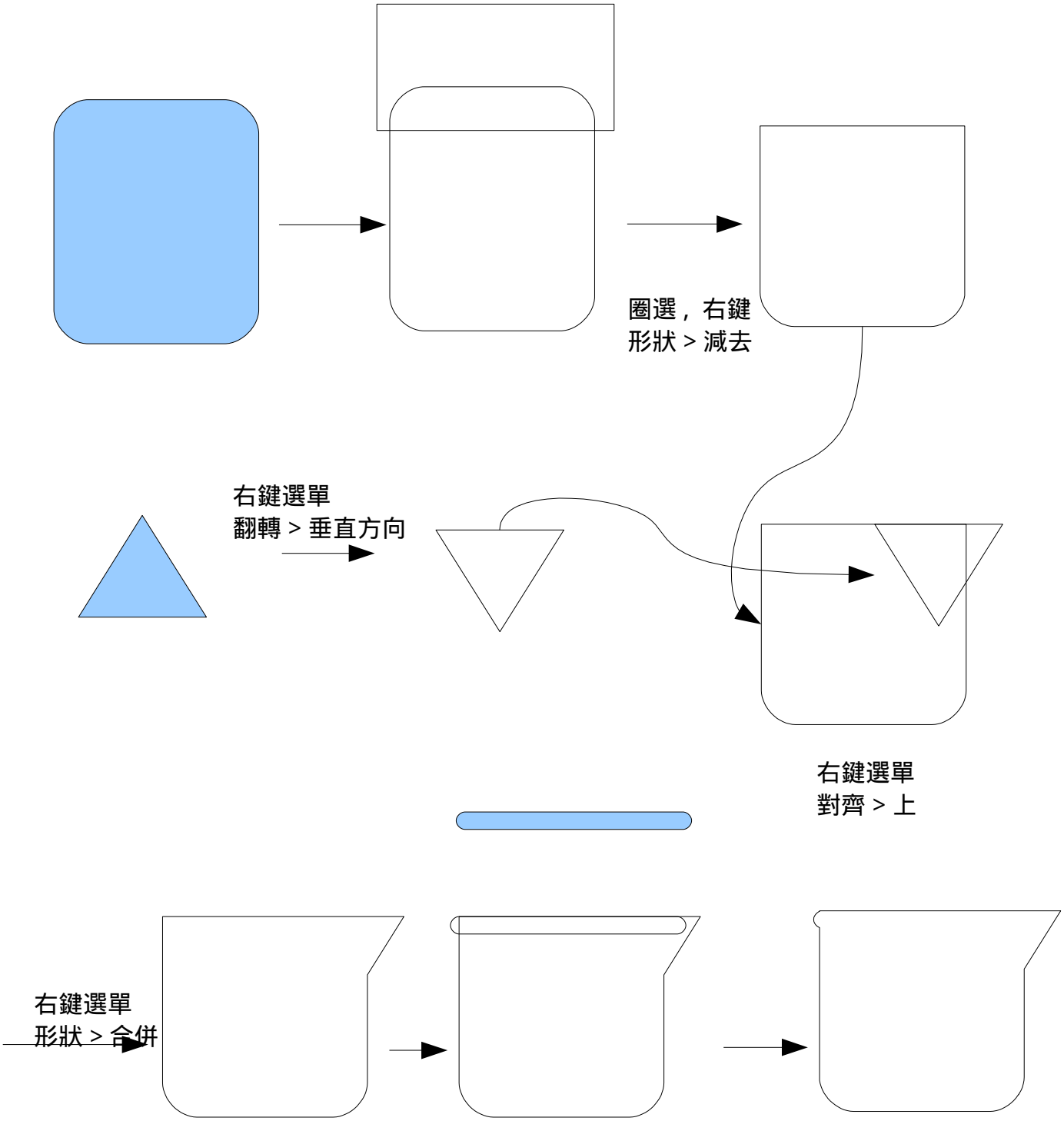
本單元常用到的功能

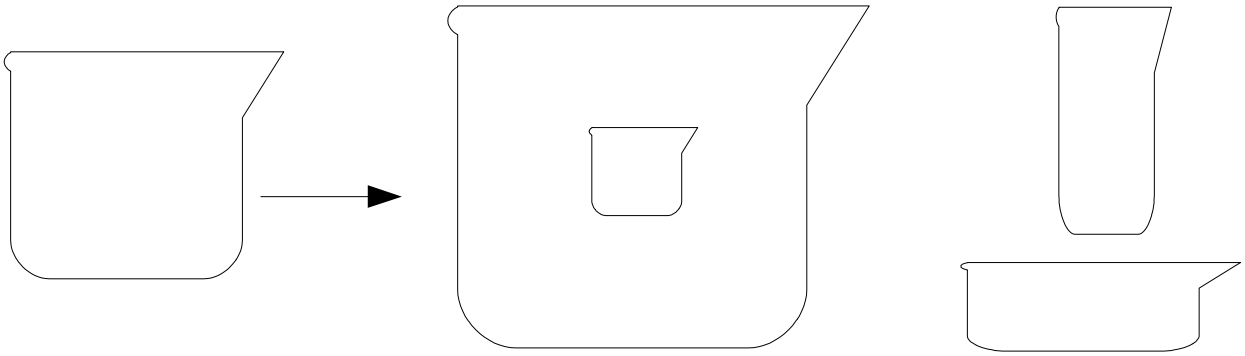


常用到滑鼠右鍵選單功能



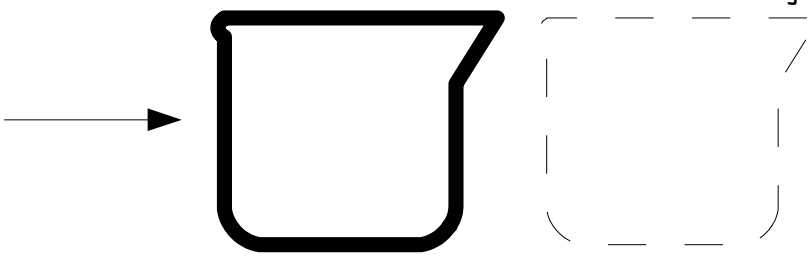
燒杯



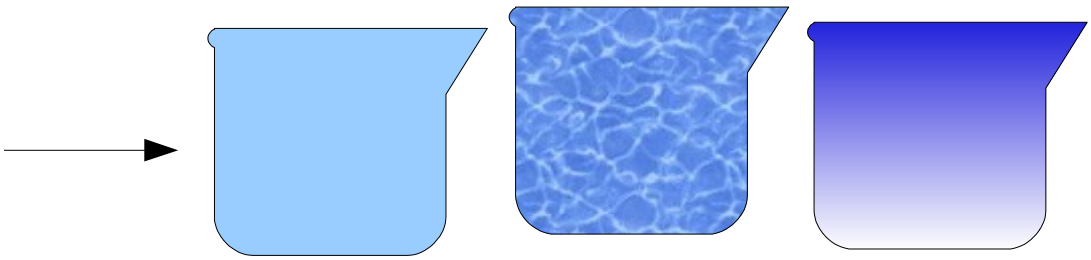


按住 Shift ，可等比例放大或縮小

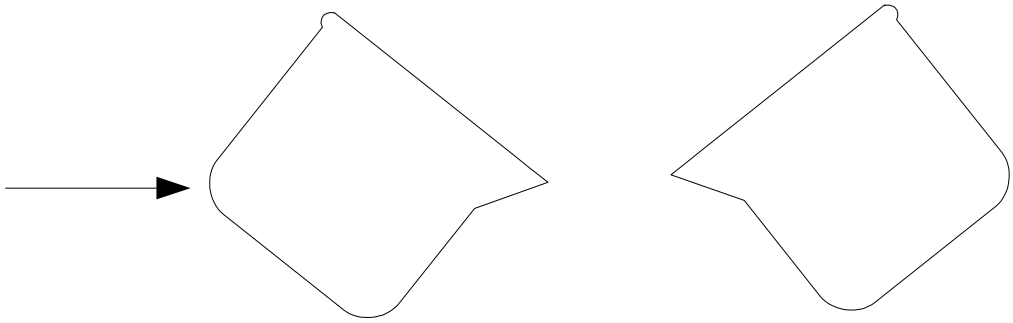
單向放大或縮小



線條粗細　　線條種類

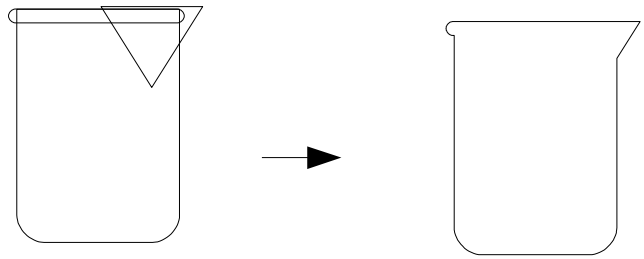


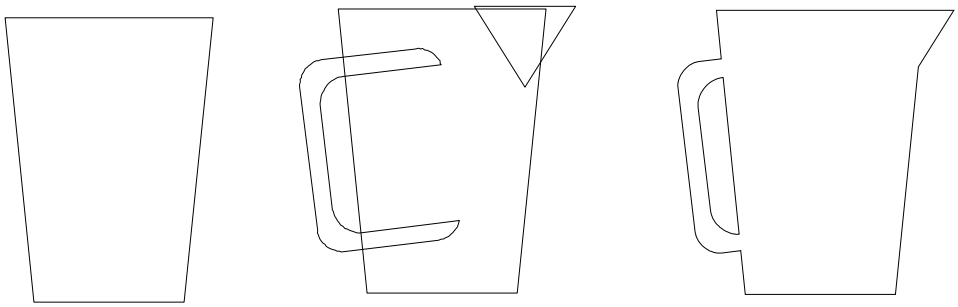
改變顏色　　點陣圖　　漸層效果

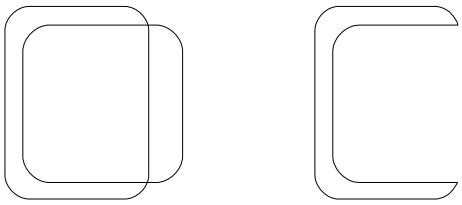


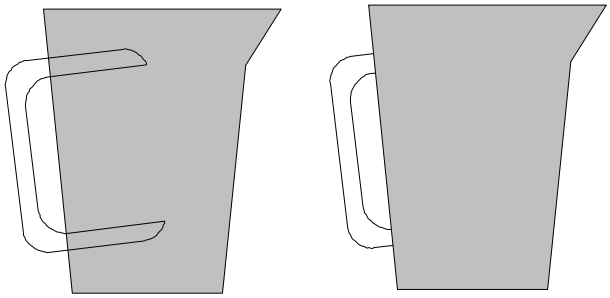
旋轉　　翻轉 > 水平

其他的燒杯

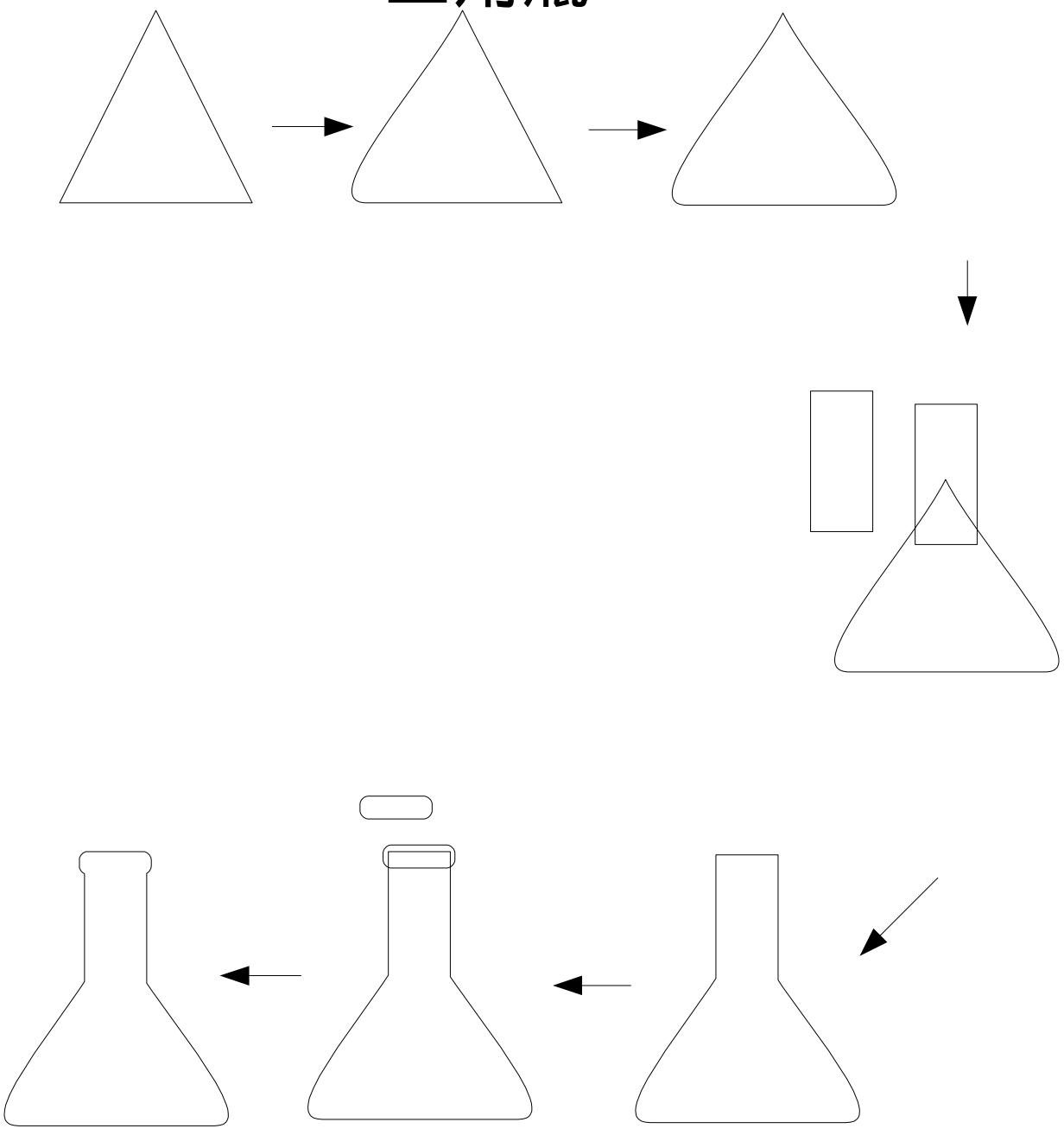




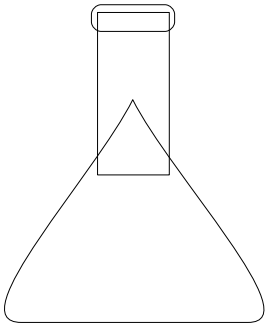
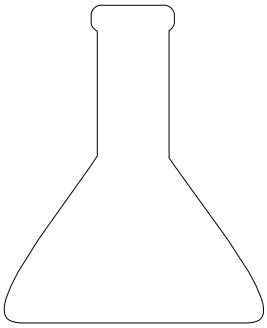
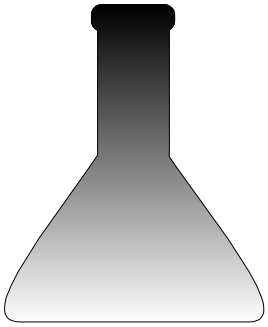
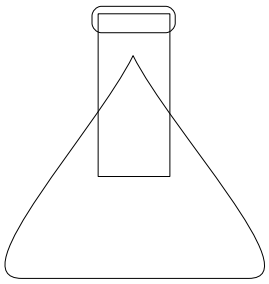
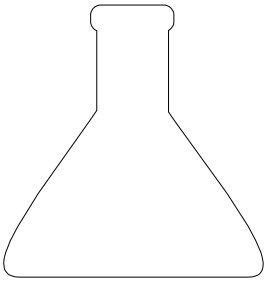
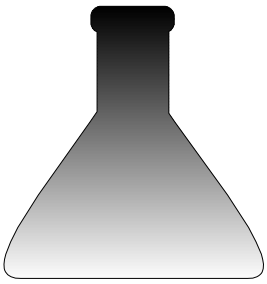
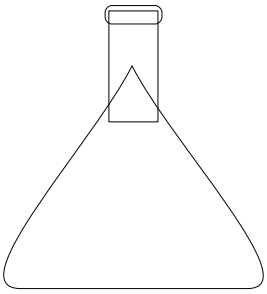
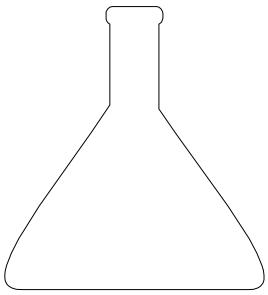
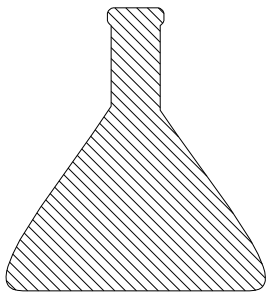
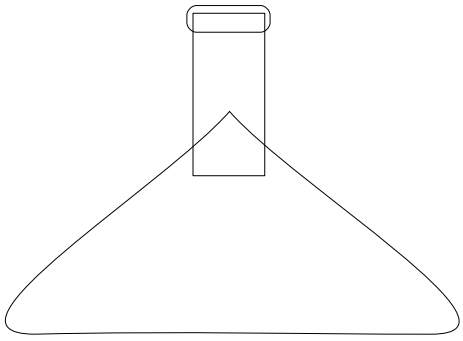
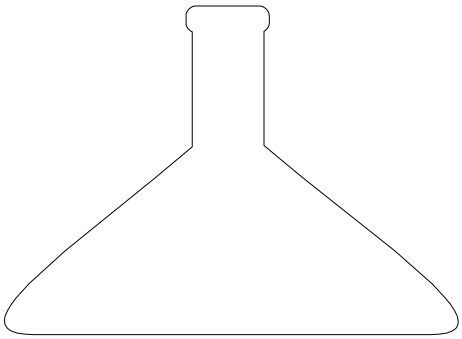
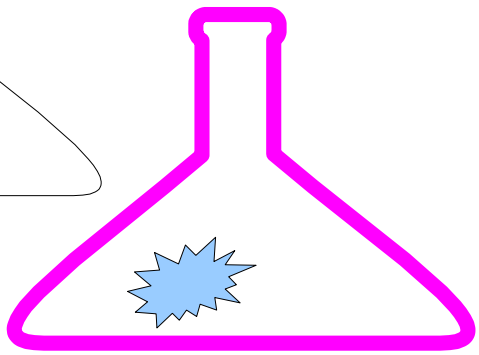


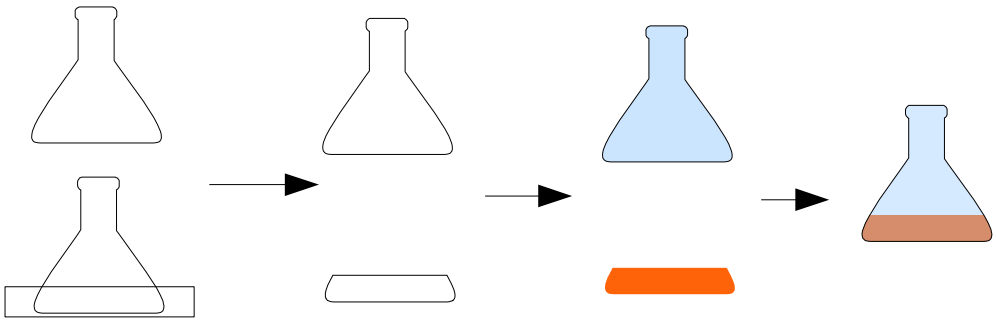


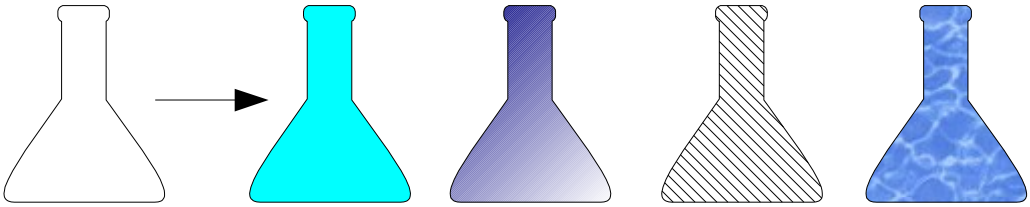
三角瓶

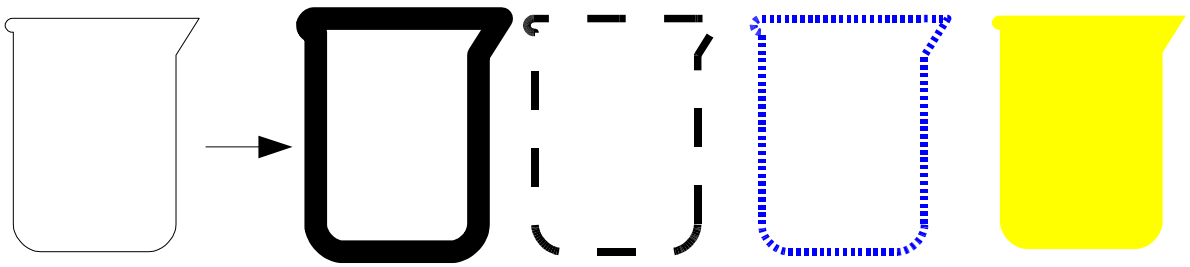


其他三角瓶

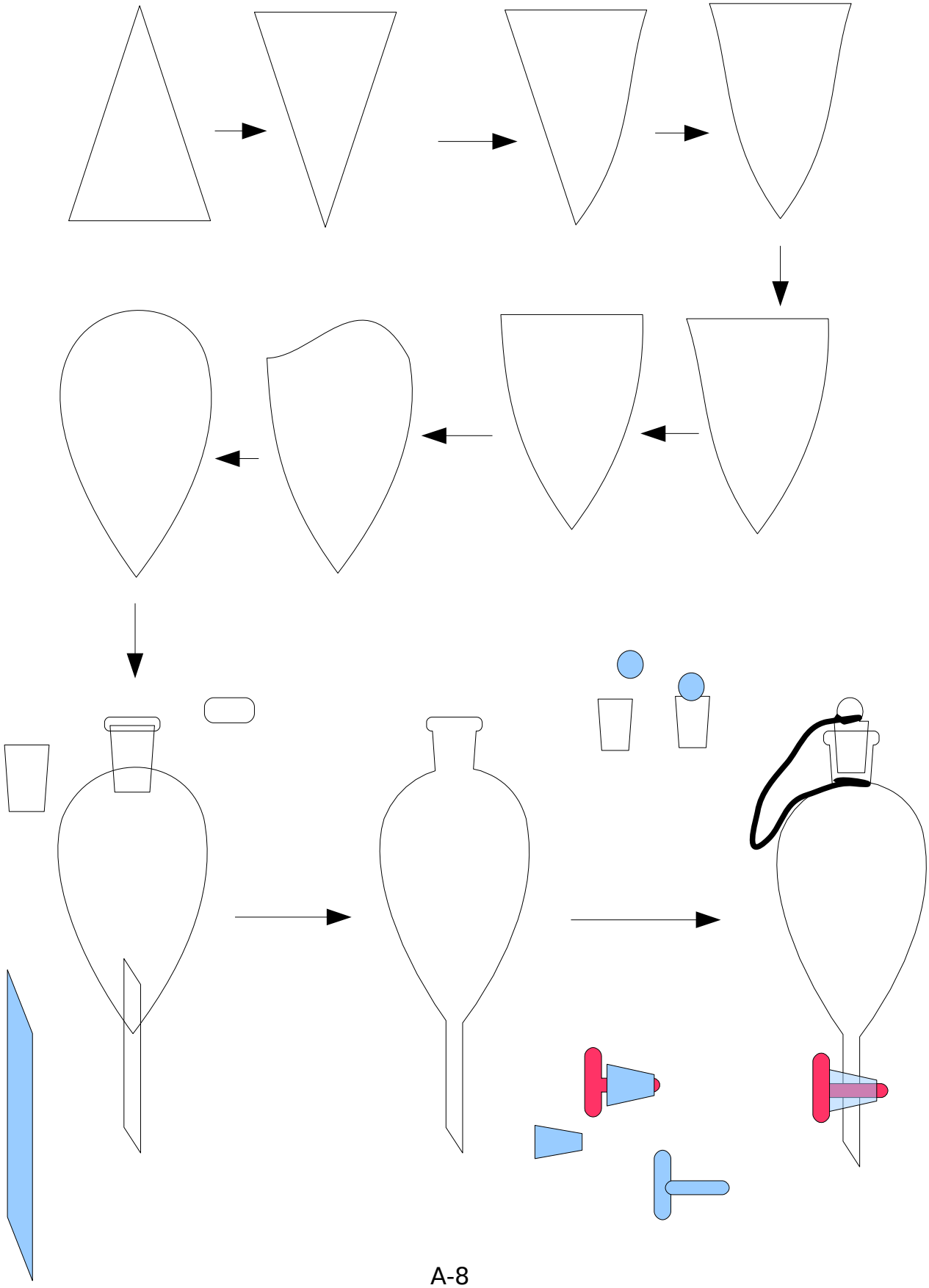















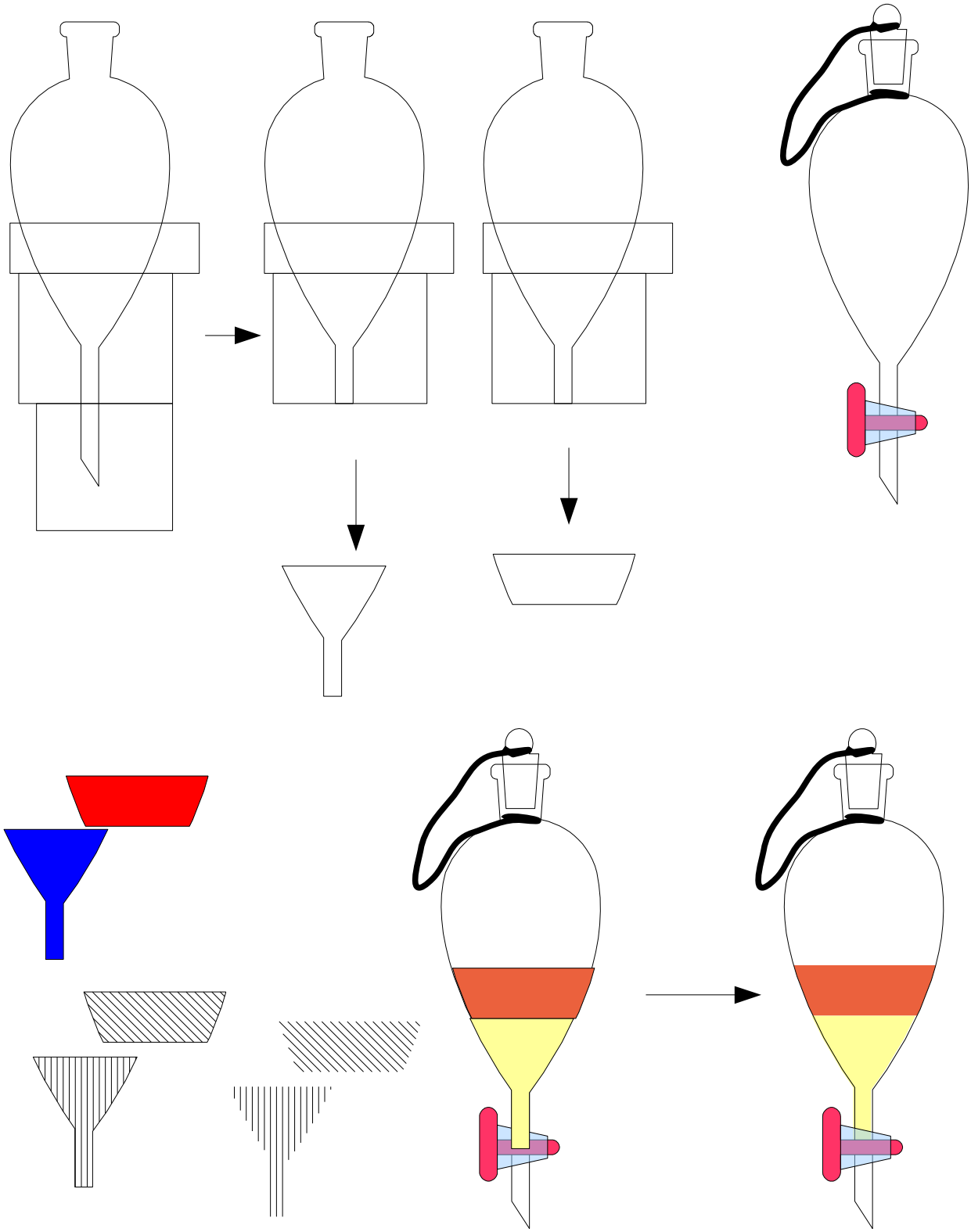




分液漏斗

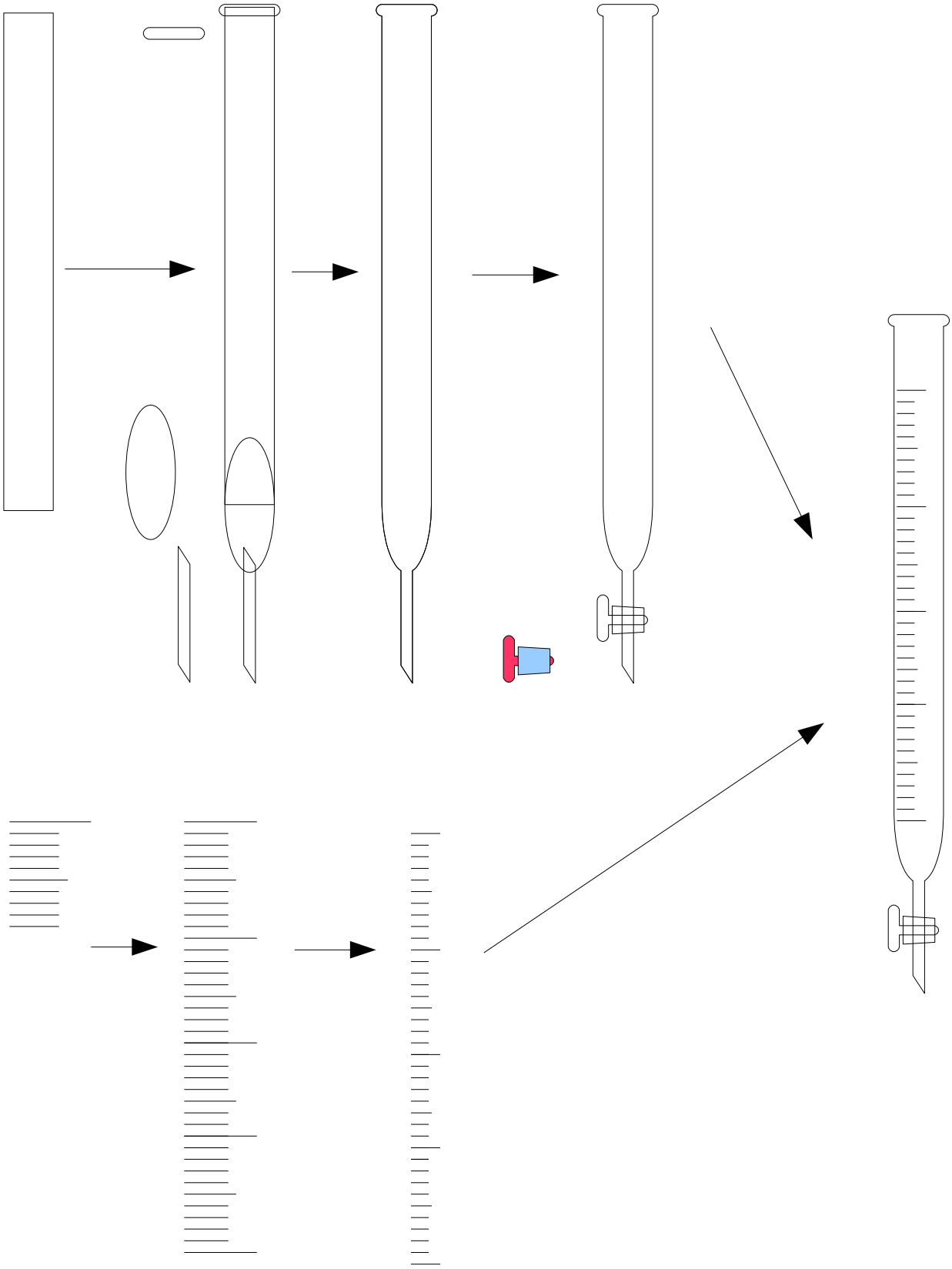


分液漏斗變化形

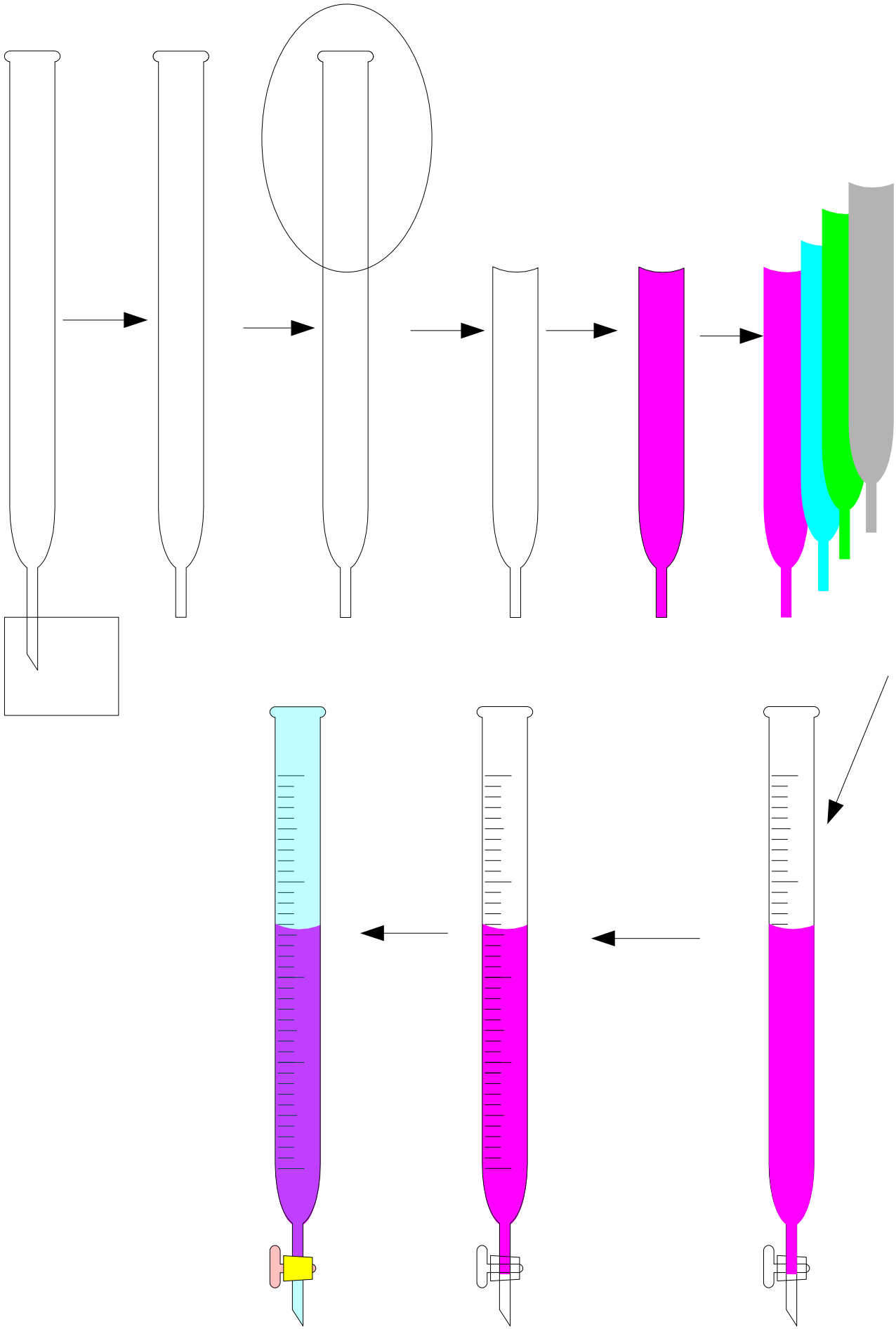


小技巧：這部份在疊合時常有小地方對不準，建議可以把色塊的邊框去除，再改變排列順序，讓色塊排到後面。

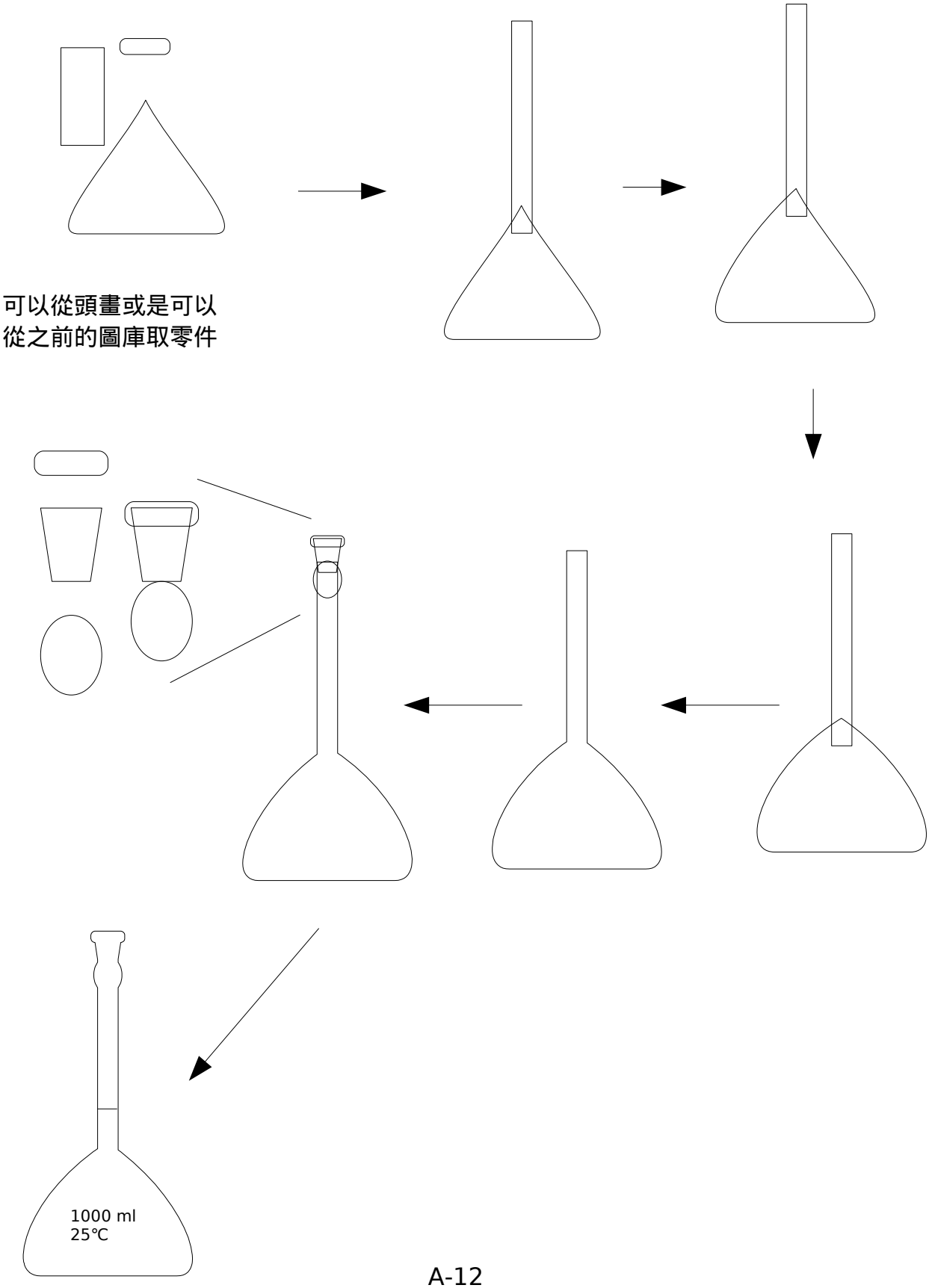
滴定管

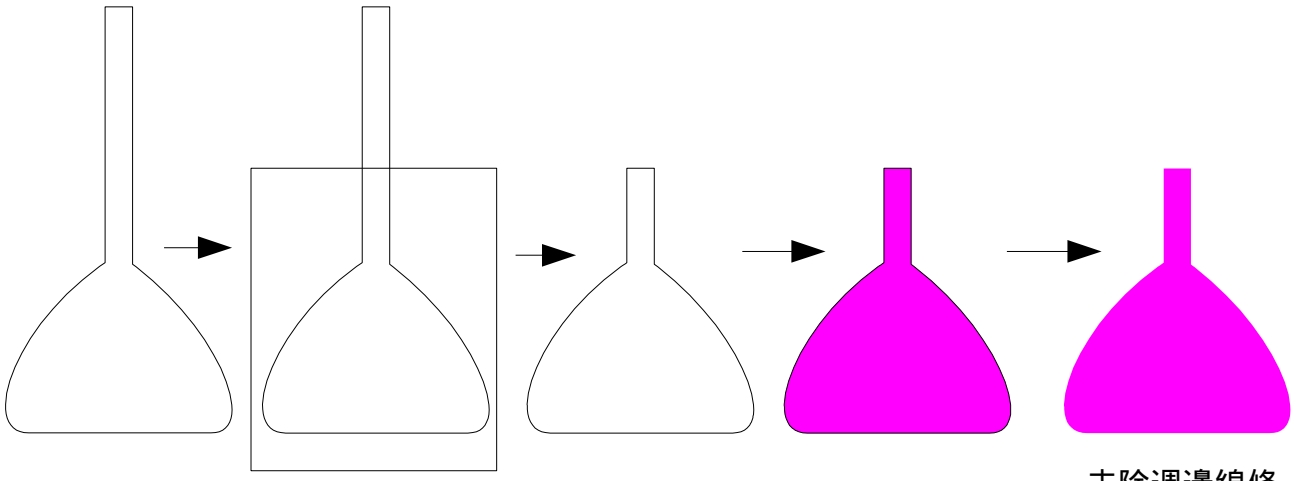


滴定管的變化型



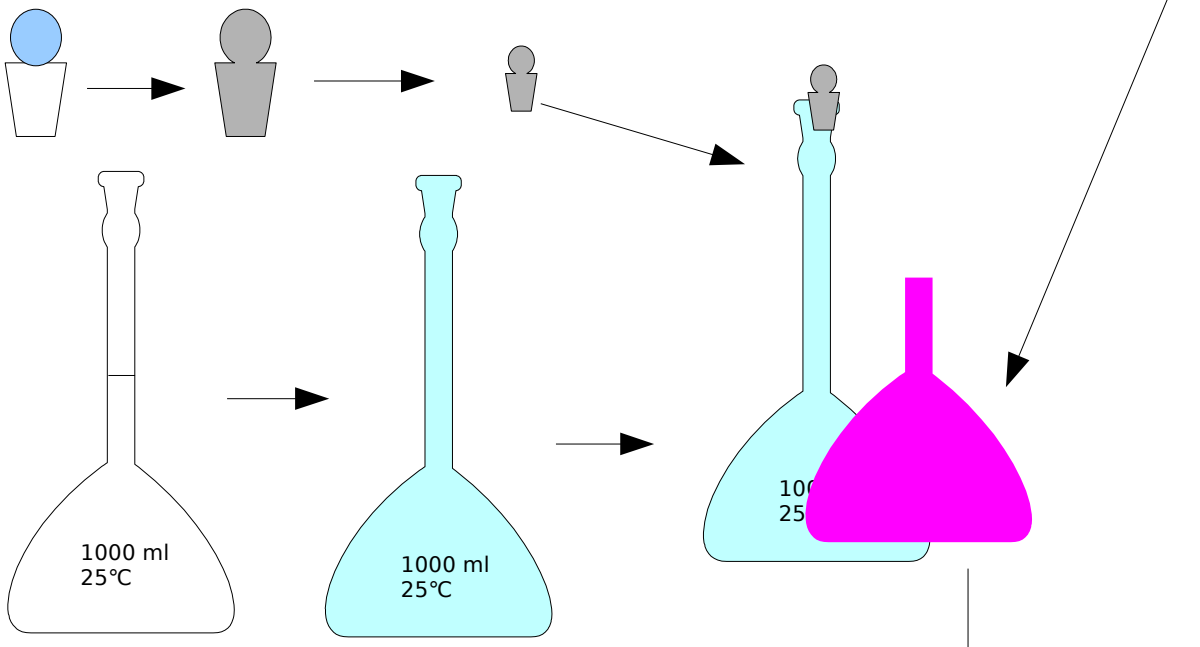
定量瓶



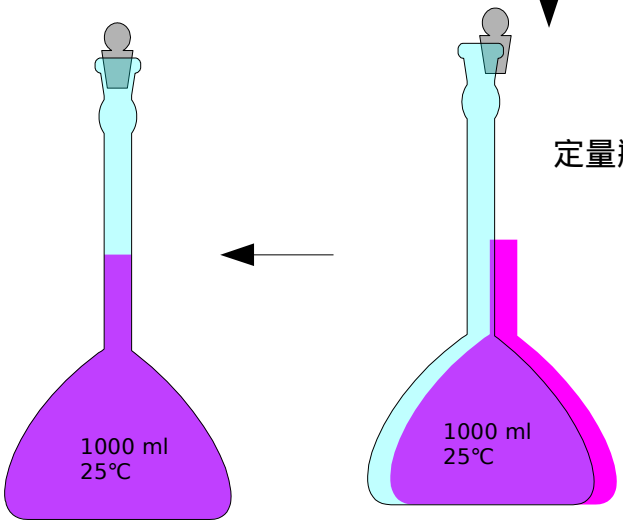


剪下

去除週邊線條

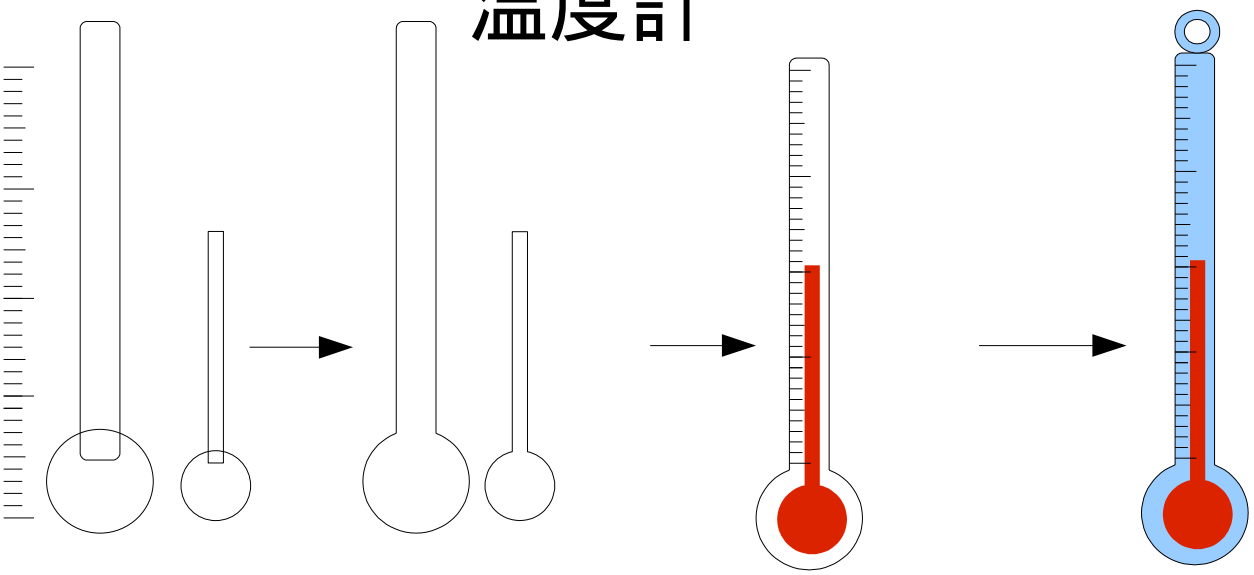


淺藍色， 75% 透明度

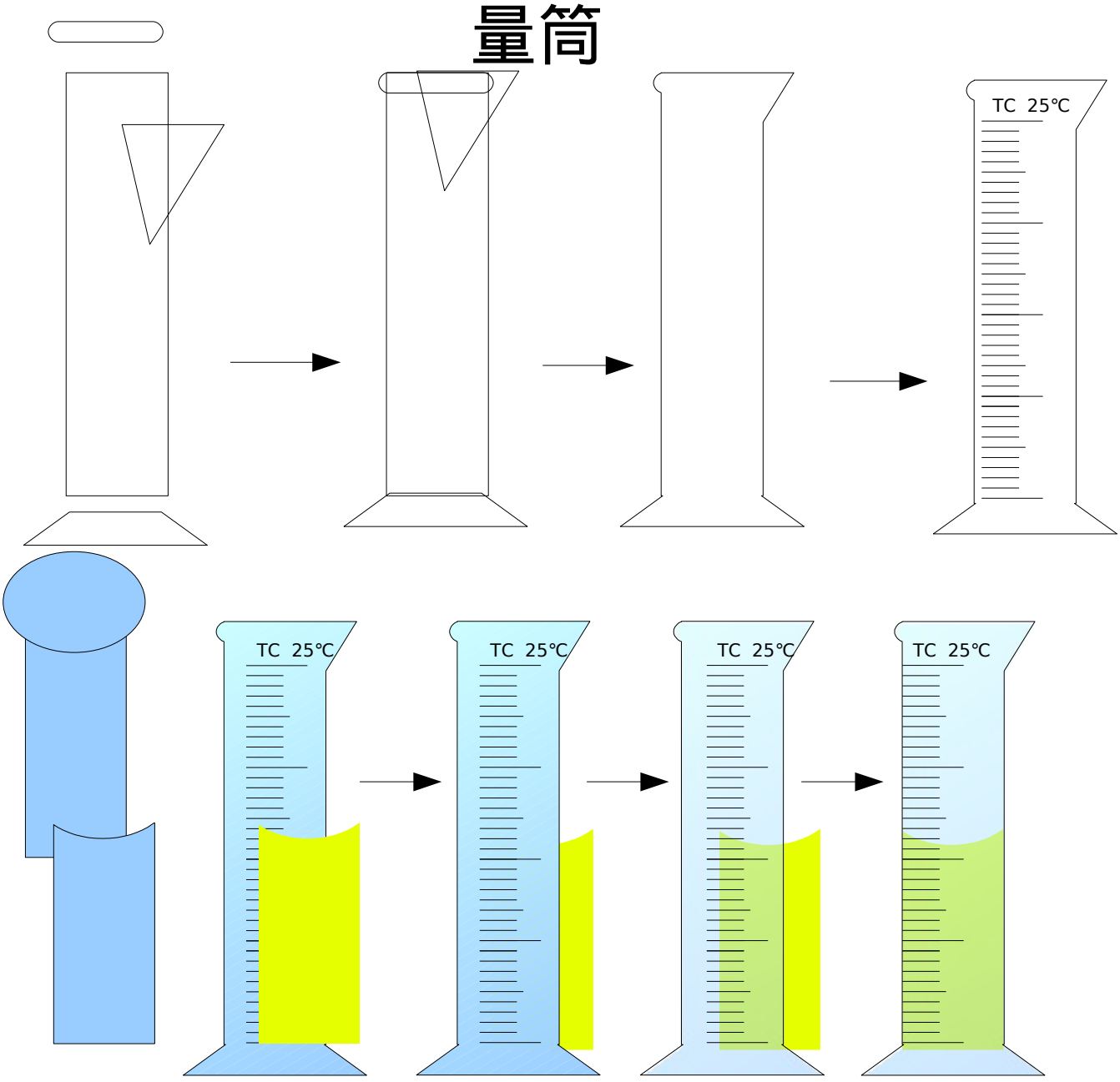


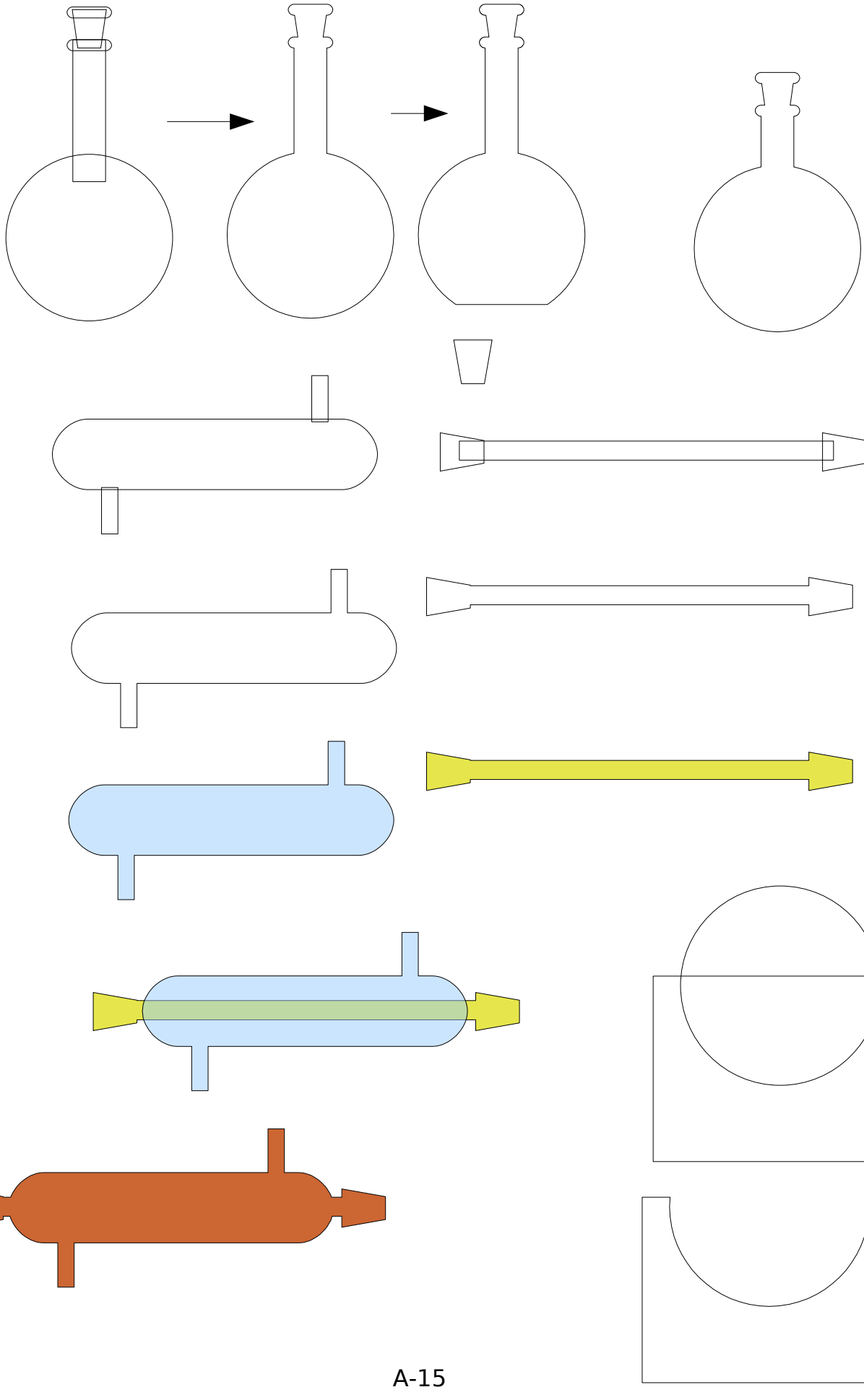
定量瓶放在上層

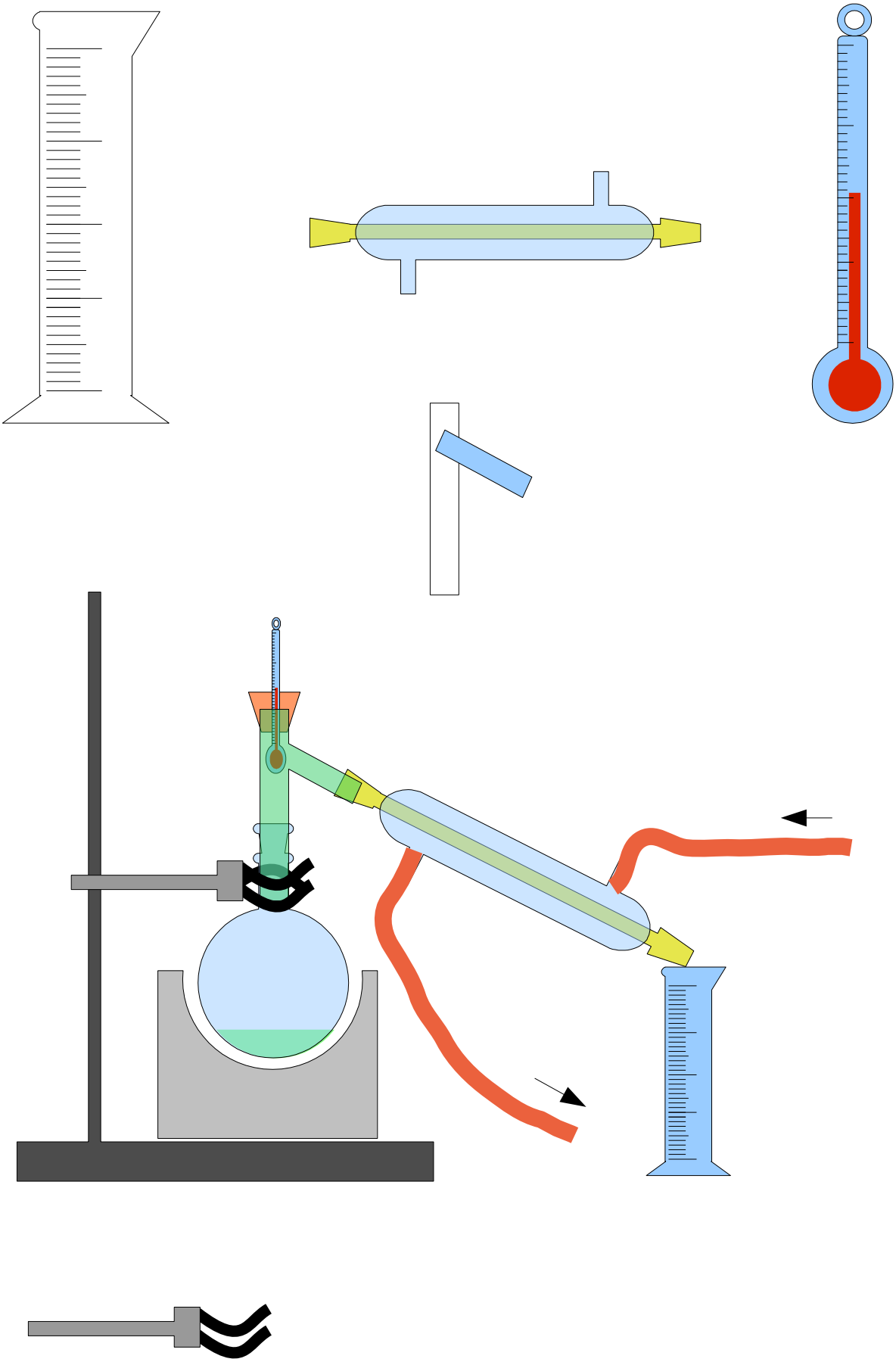
溫度計



量筒

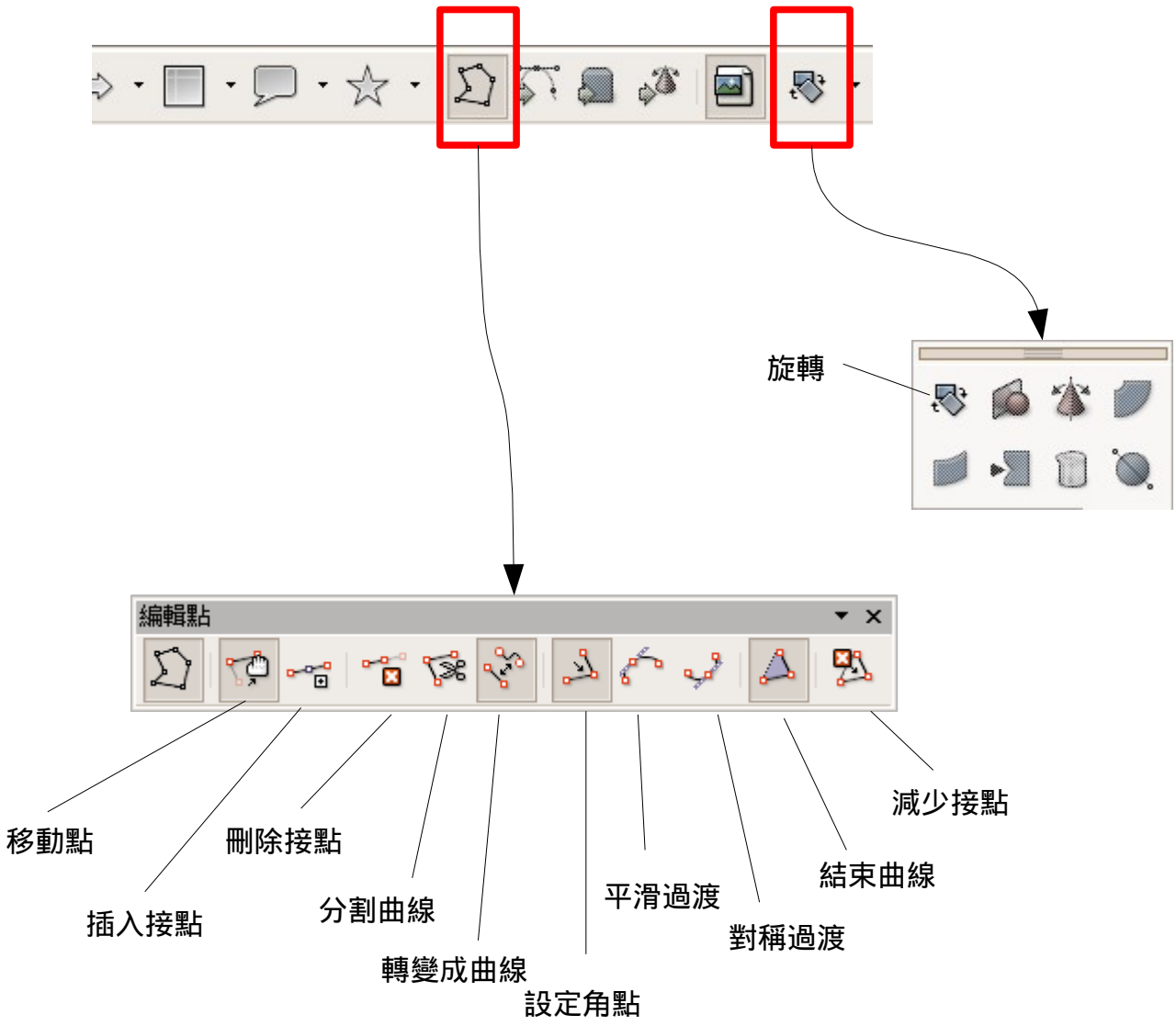




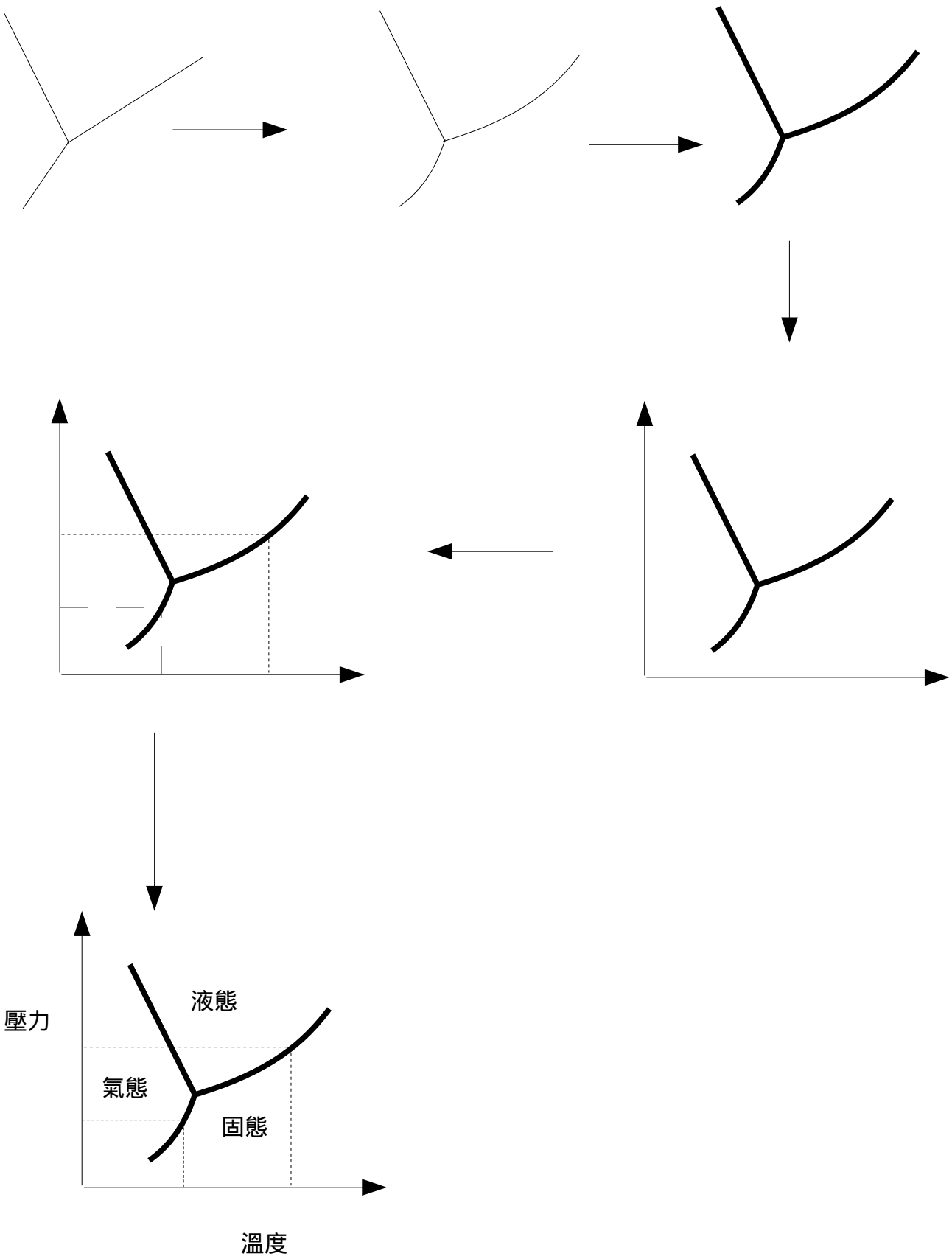


化學數據圖

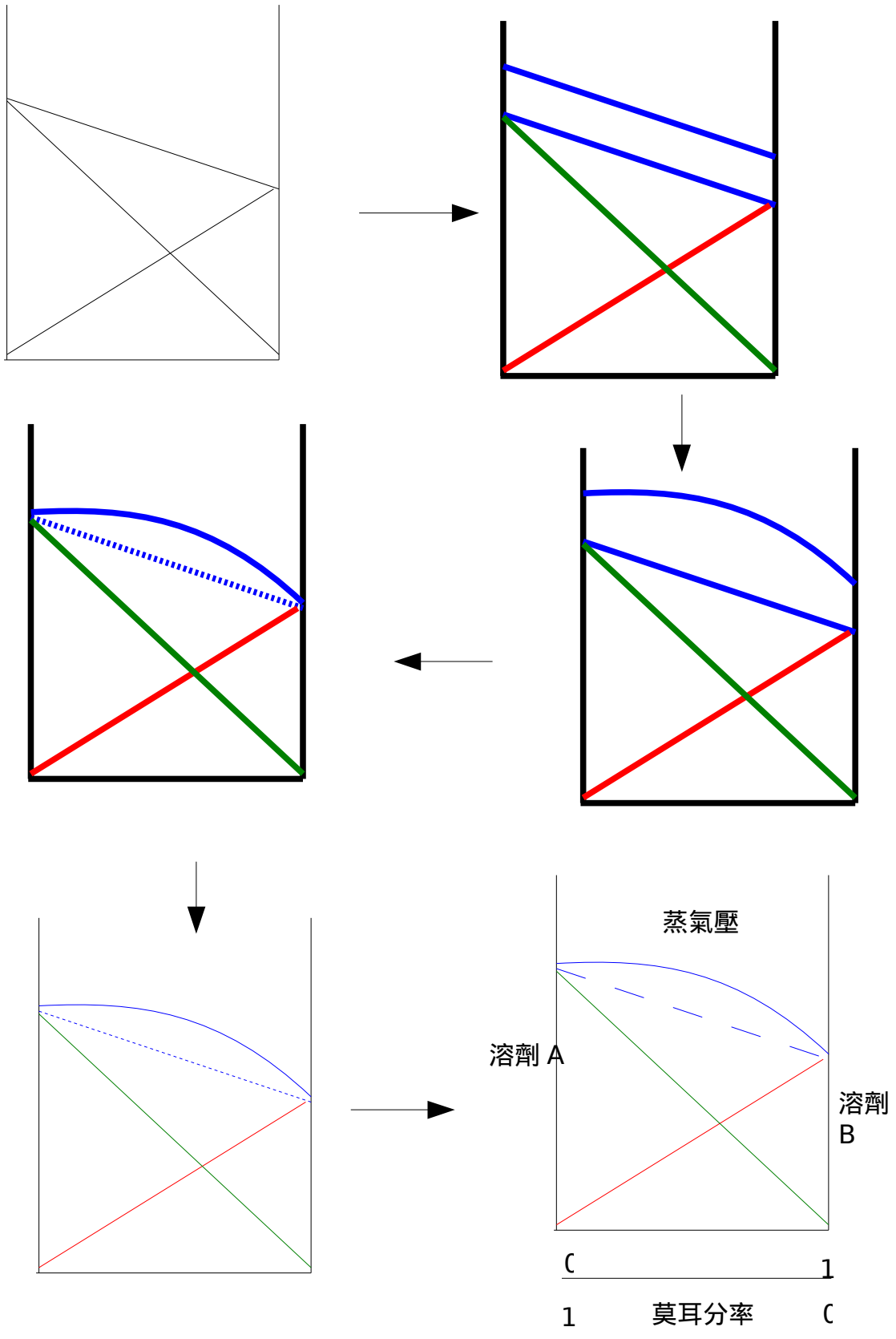
這單元將介紹常見化學資料圖的繪製，而繪圖的重點在如何改變平滑線條，使線條看起來就像我們要的圖樣子。



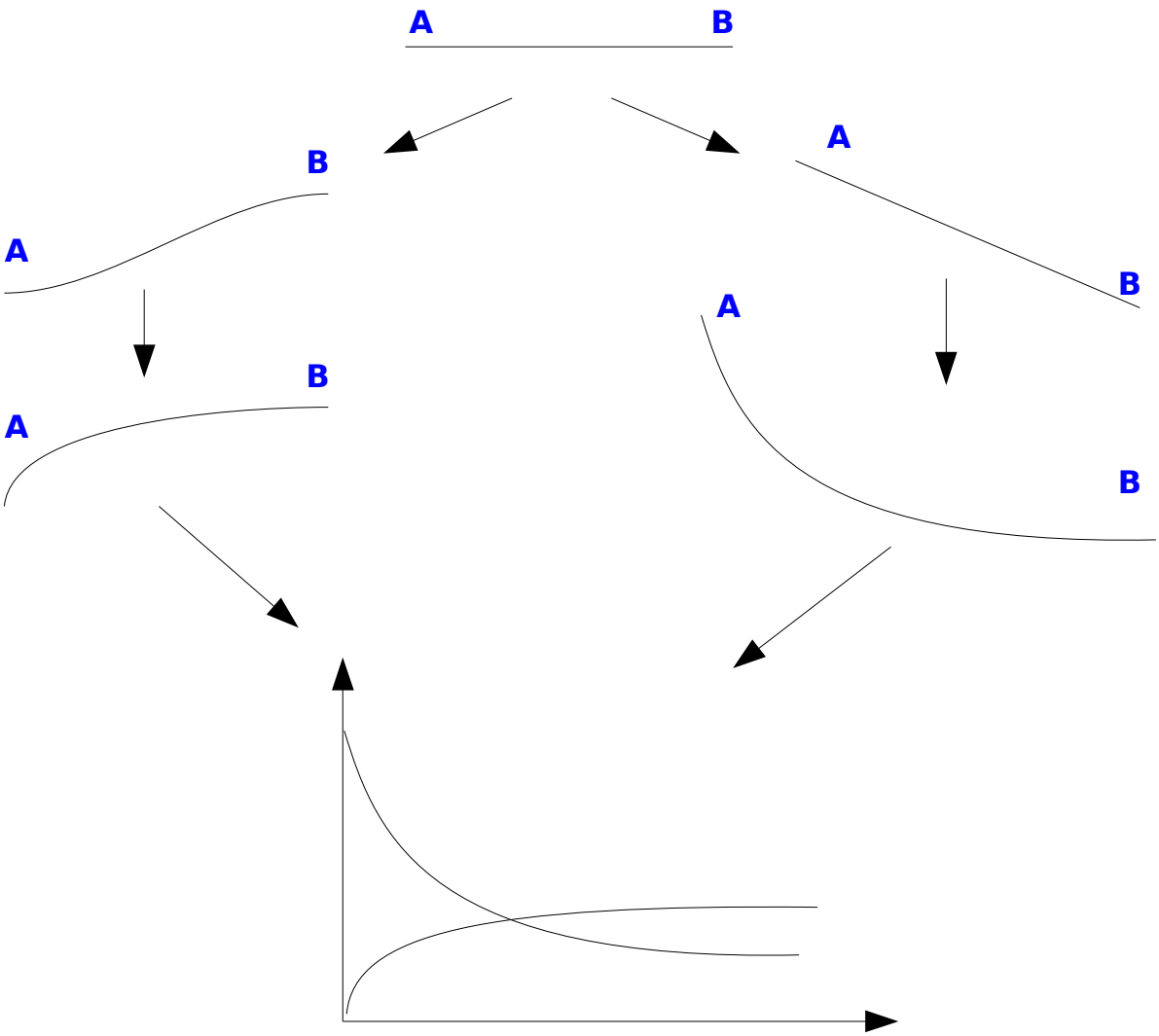
三相圖

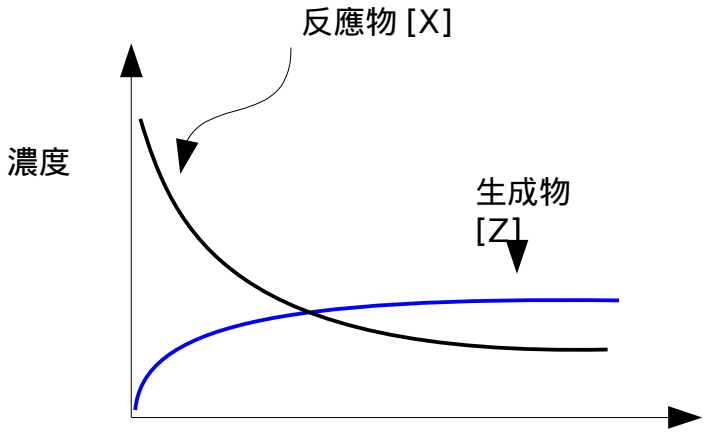


理想溶液



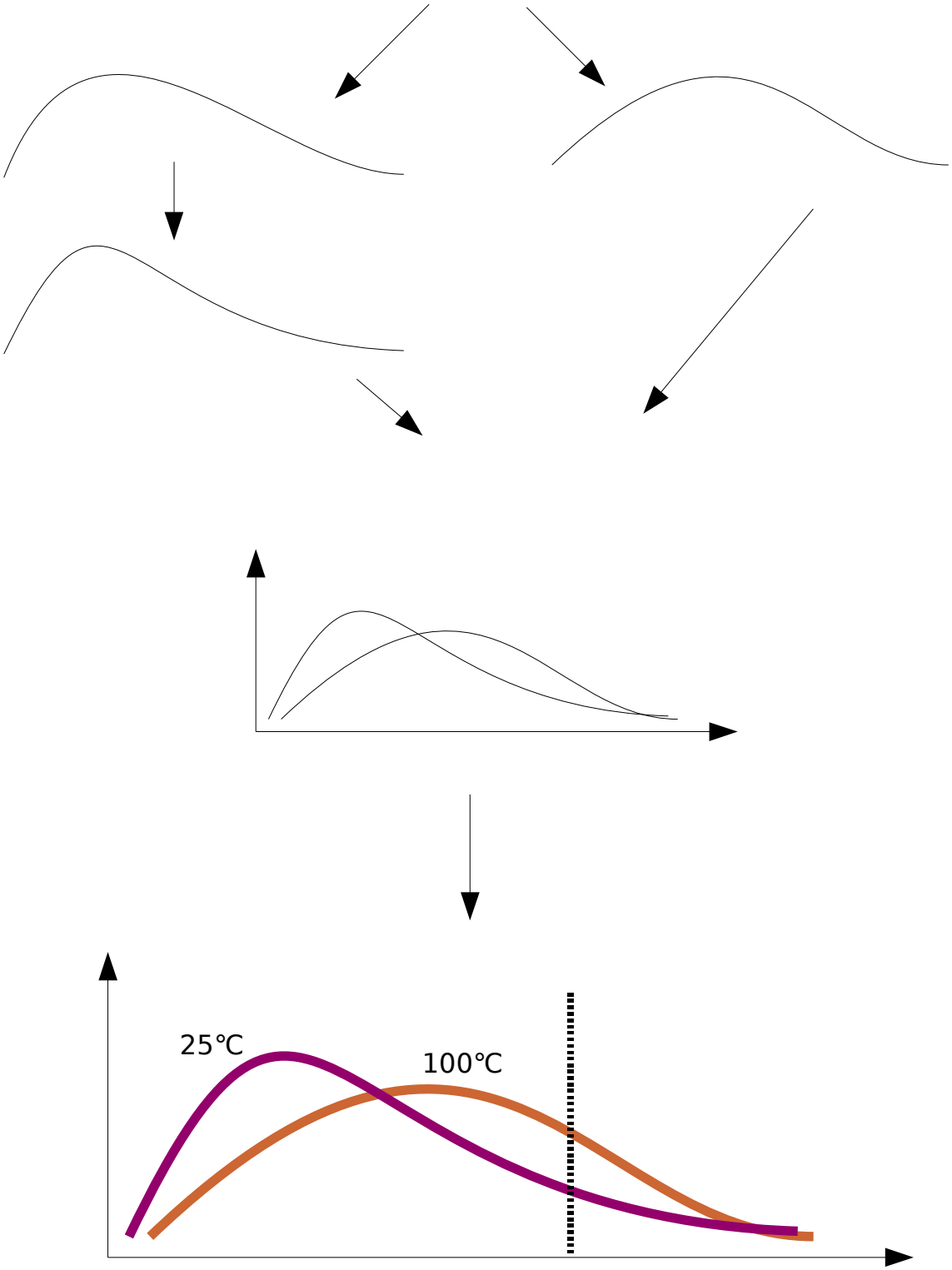
反應平衡

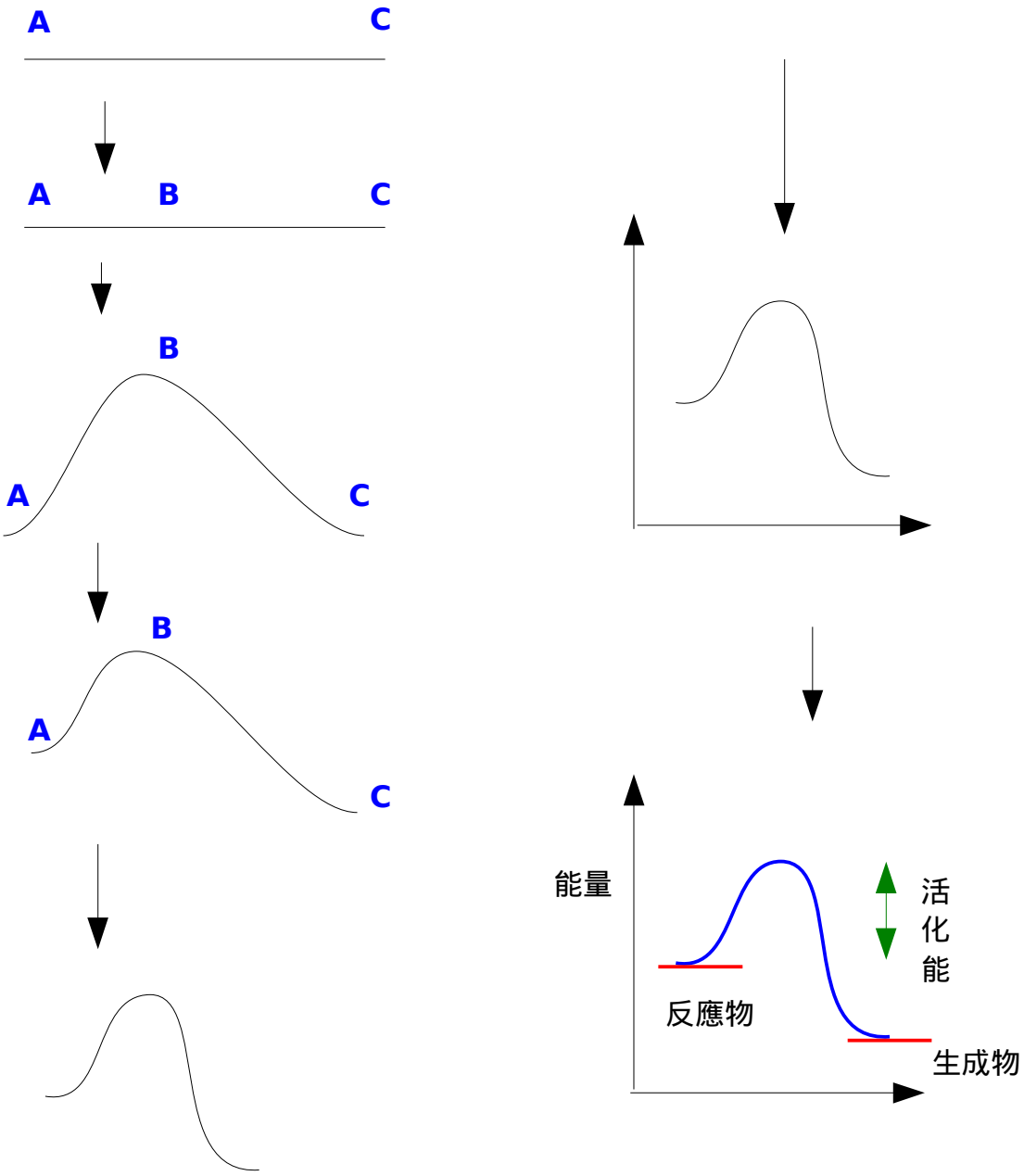




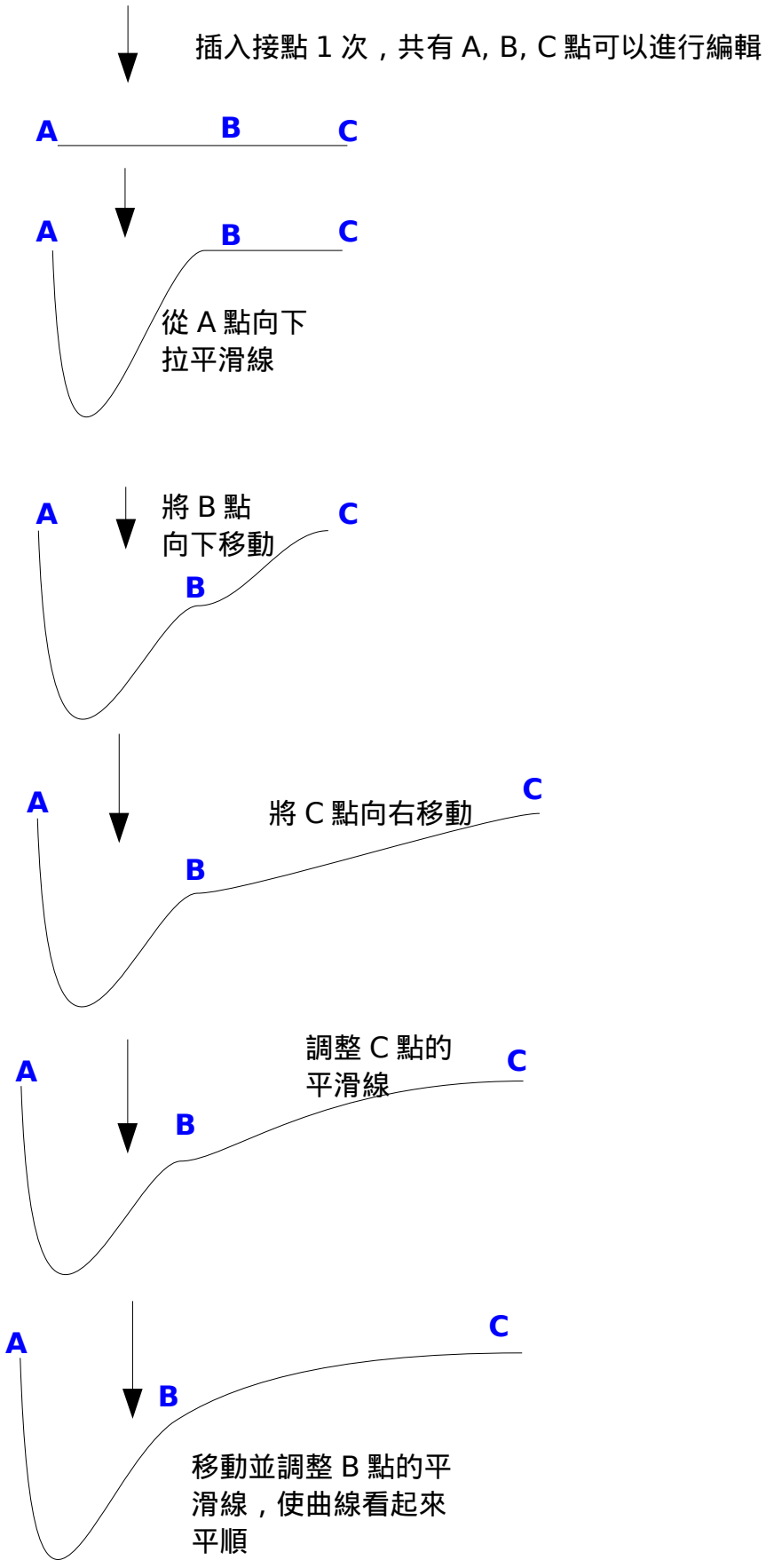
$2X+Y \leftrightarrow Z$

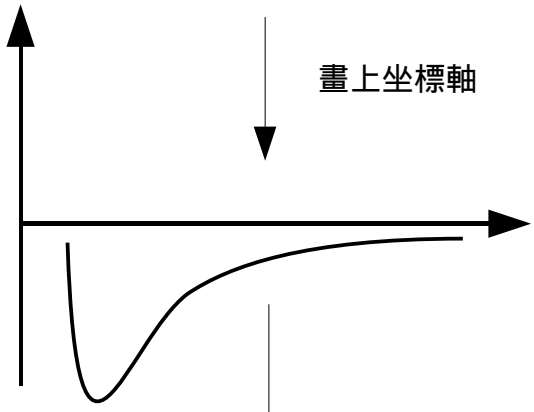
分子分佈

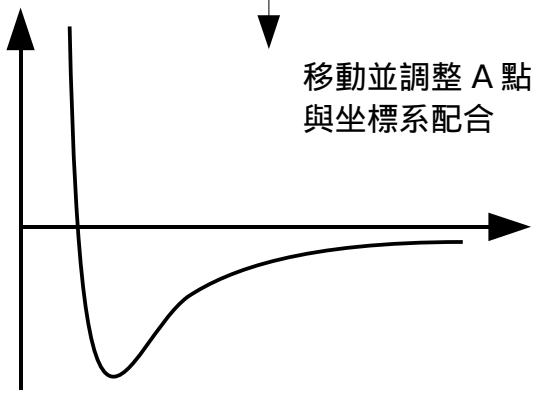


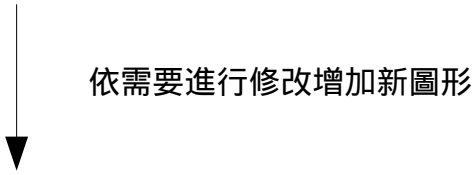

A
C
A
B
C
B
A
C
B
A
C
能量
活
化
能
反應物
生成物

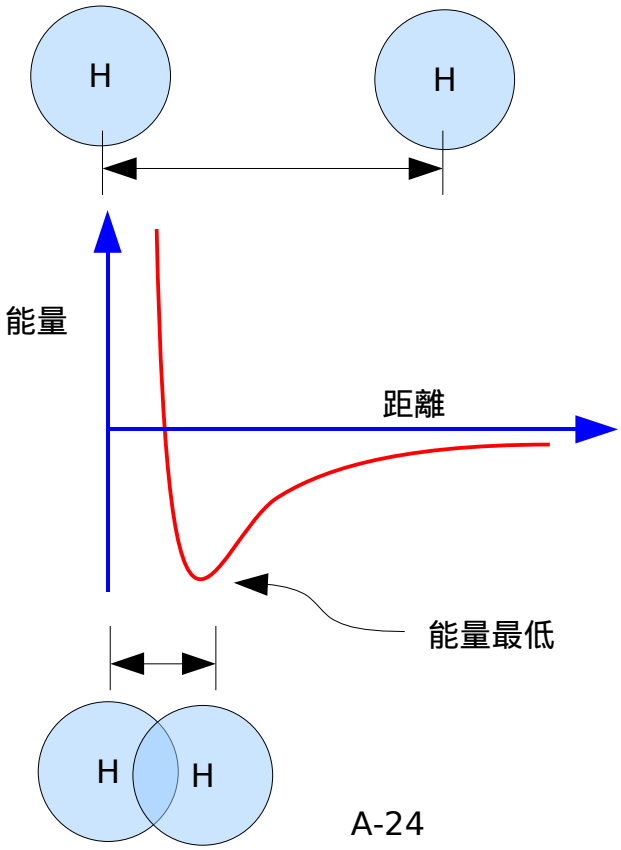
共價鍵能量圖


插入接點 1 次，共有 A, B, C 點可以進行編輯
A
B
C
A
B
C
從 A 點向下
拉平滑線
將 B 點
向下移動
A
C
B
將 C 點向右移動
A
C
B
調整 C 點的
平滑線
A
C
B
A
C
B
移動並調整 B 點的平
滑線，使曲線看起來
平順


畫上坐標軸

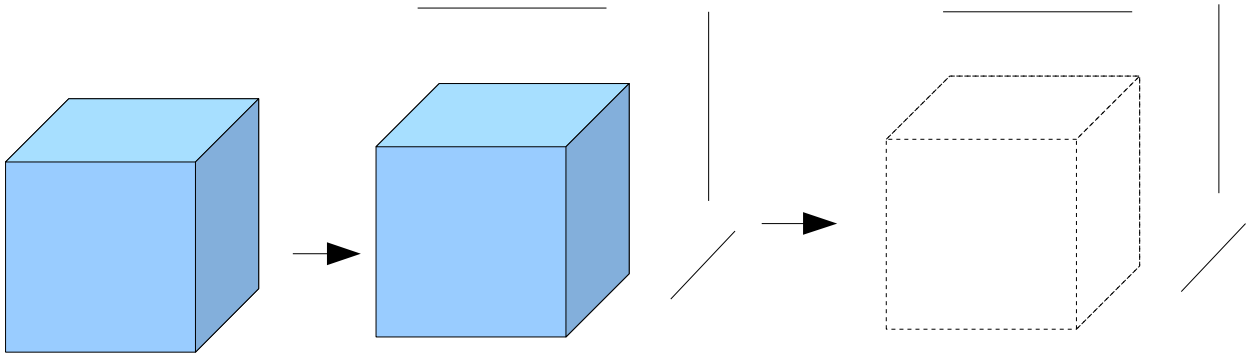

移動並調整 A 點的平滑線，使曲線
與坐標系配合


依需要進行修改增加新圖形


H
H
能量
距離
能量最低
H
H

化學立體相關圖形

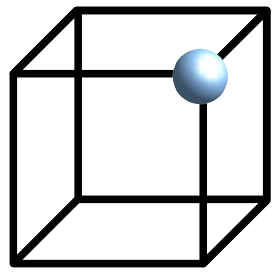
使用 Draw 的範本



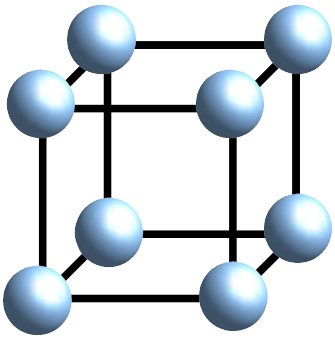
立方體是 取自
Draw 的範本

畫 3 條平行線

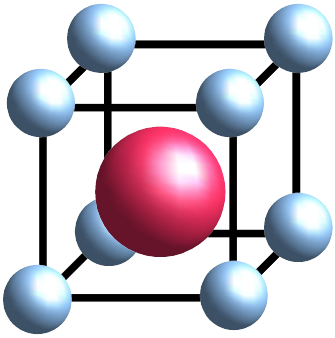
排入平行線，使
成立體

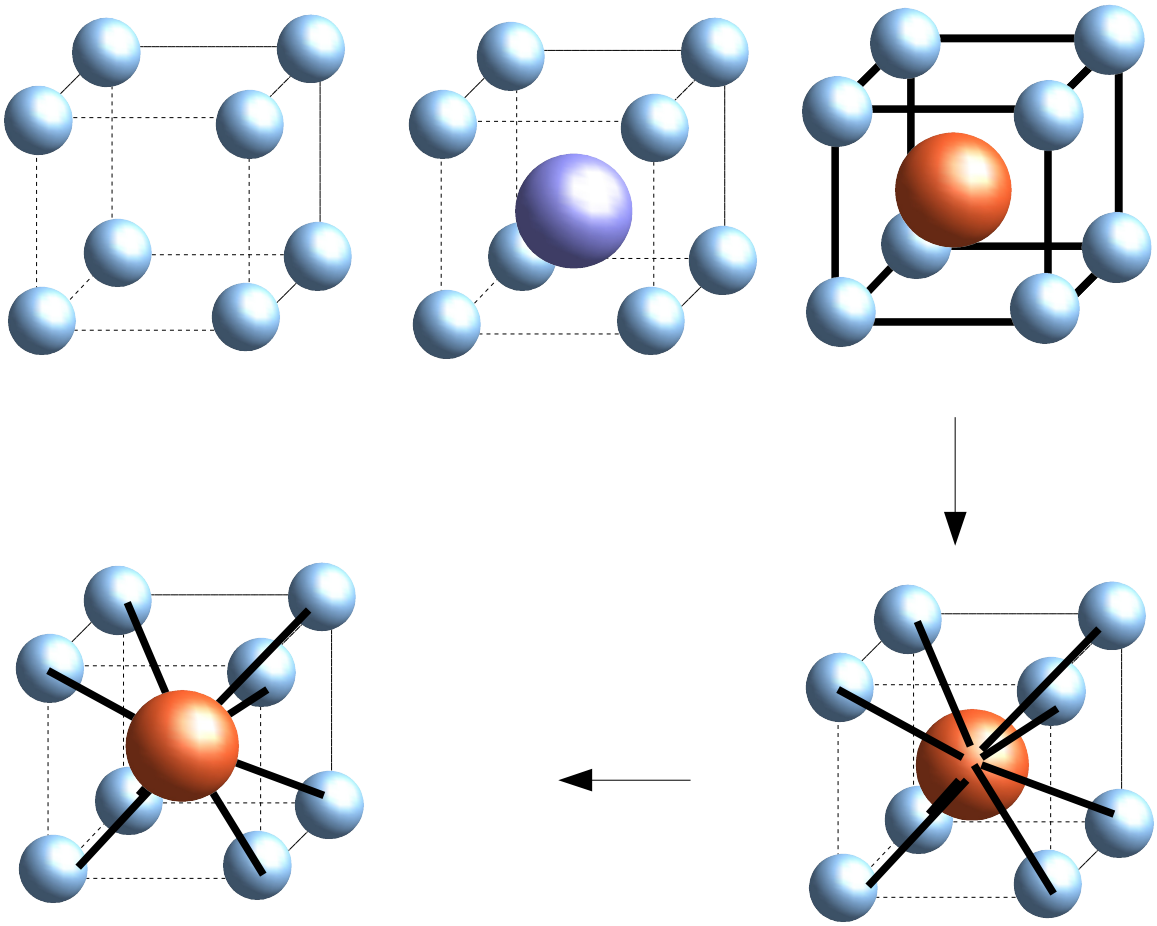


立體球是 Draw
的範本

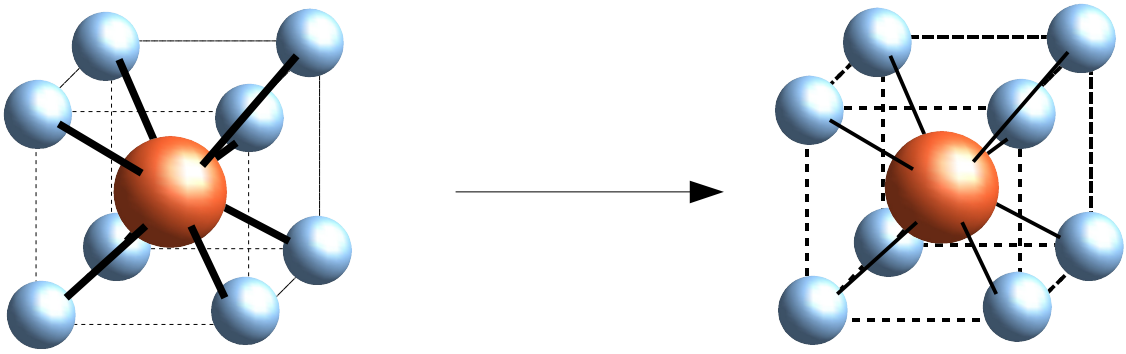


複製貼上，共 8 個球

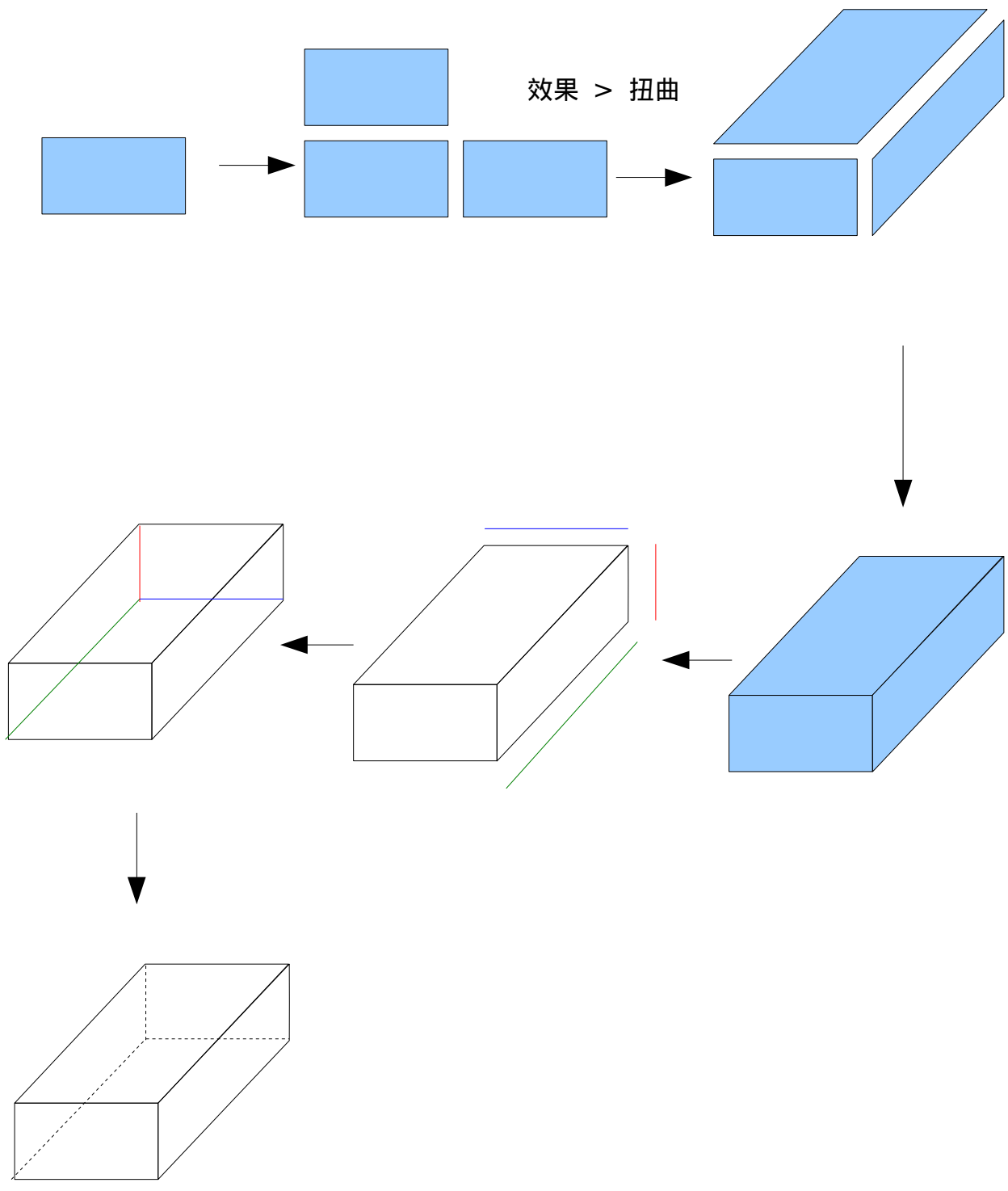




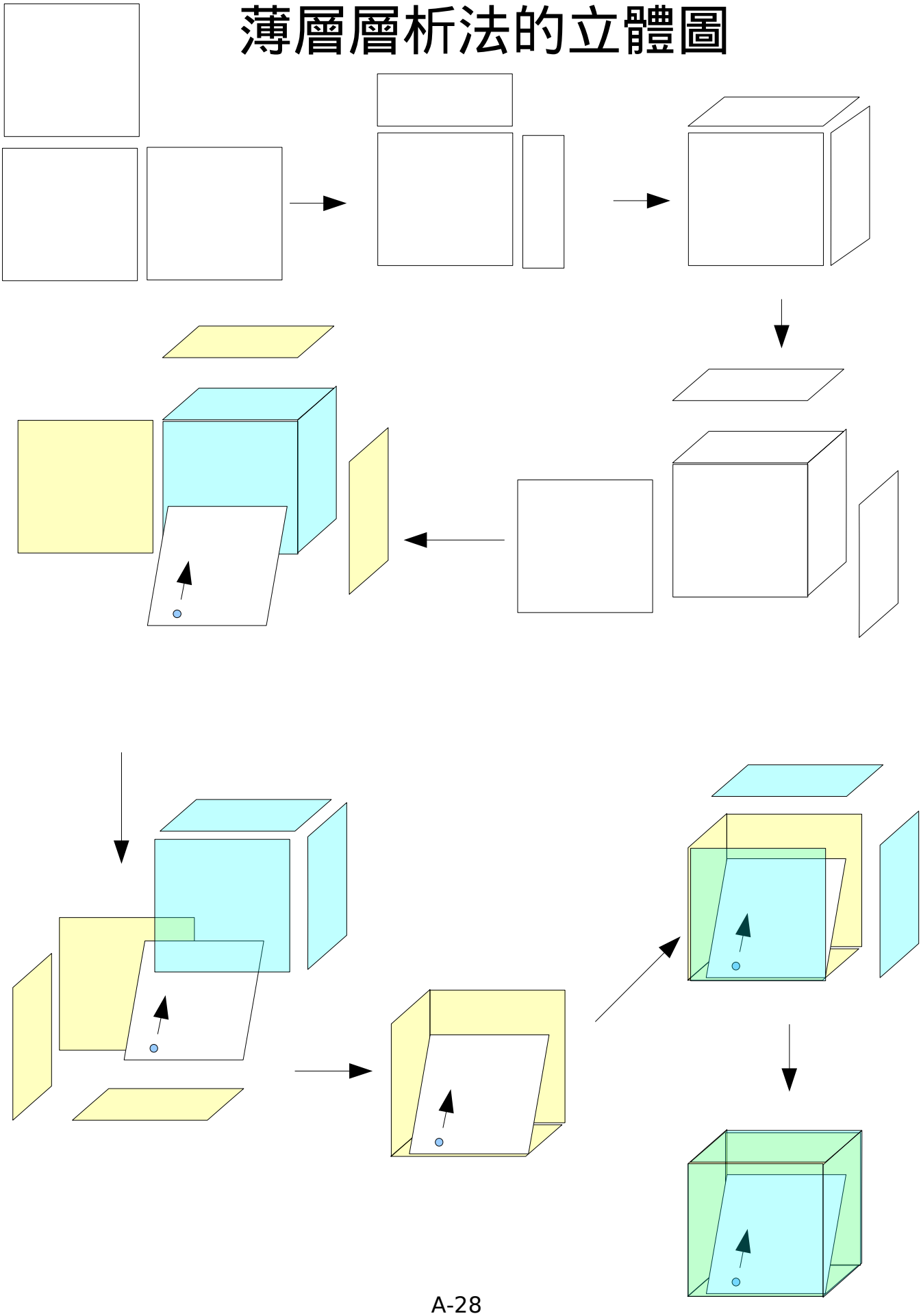
把紅球放到最上層

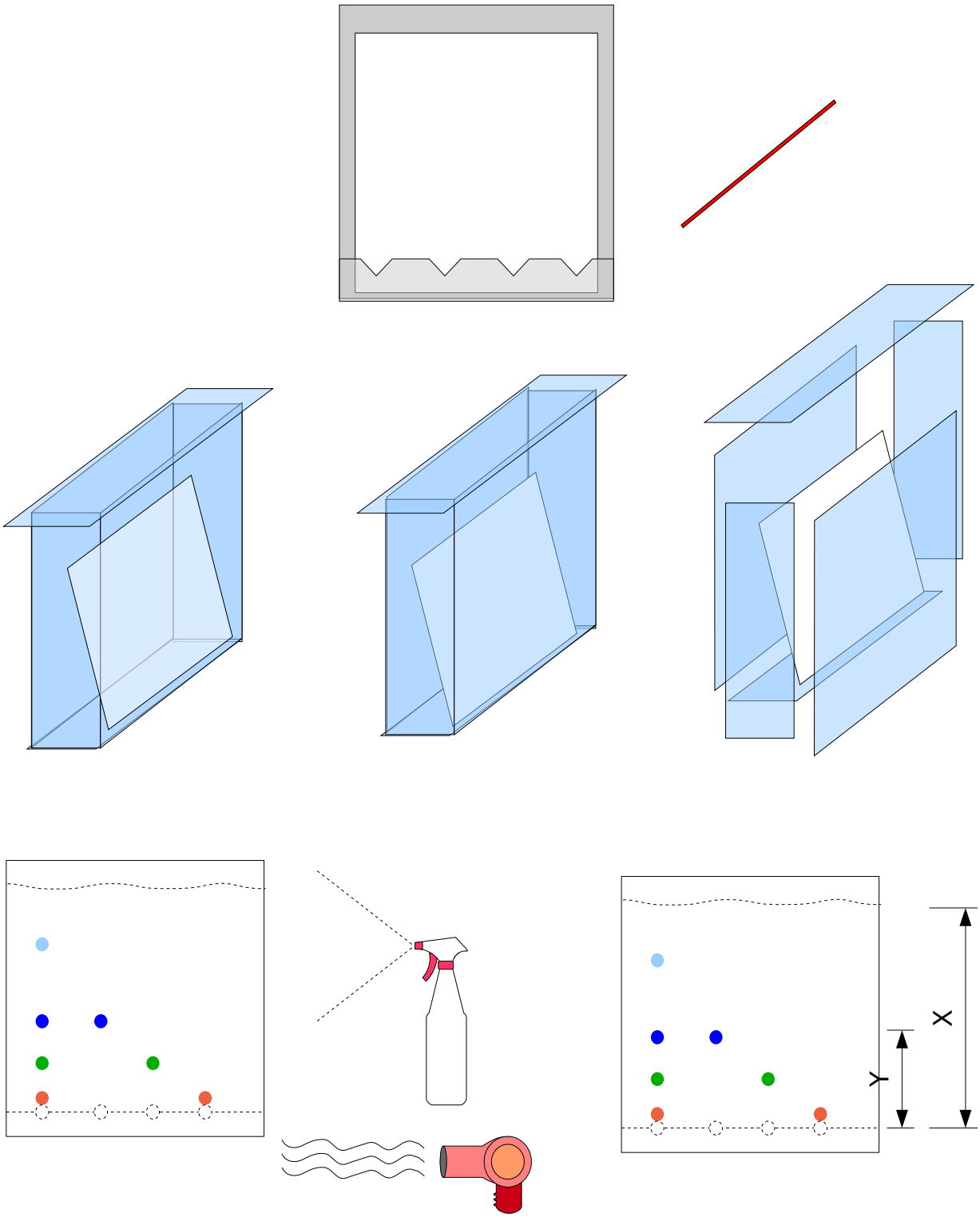


依立體性把鍵排在上層及調整長度與角度


效果 > 扭曲

薄層層析法的立體圖



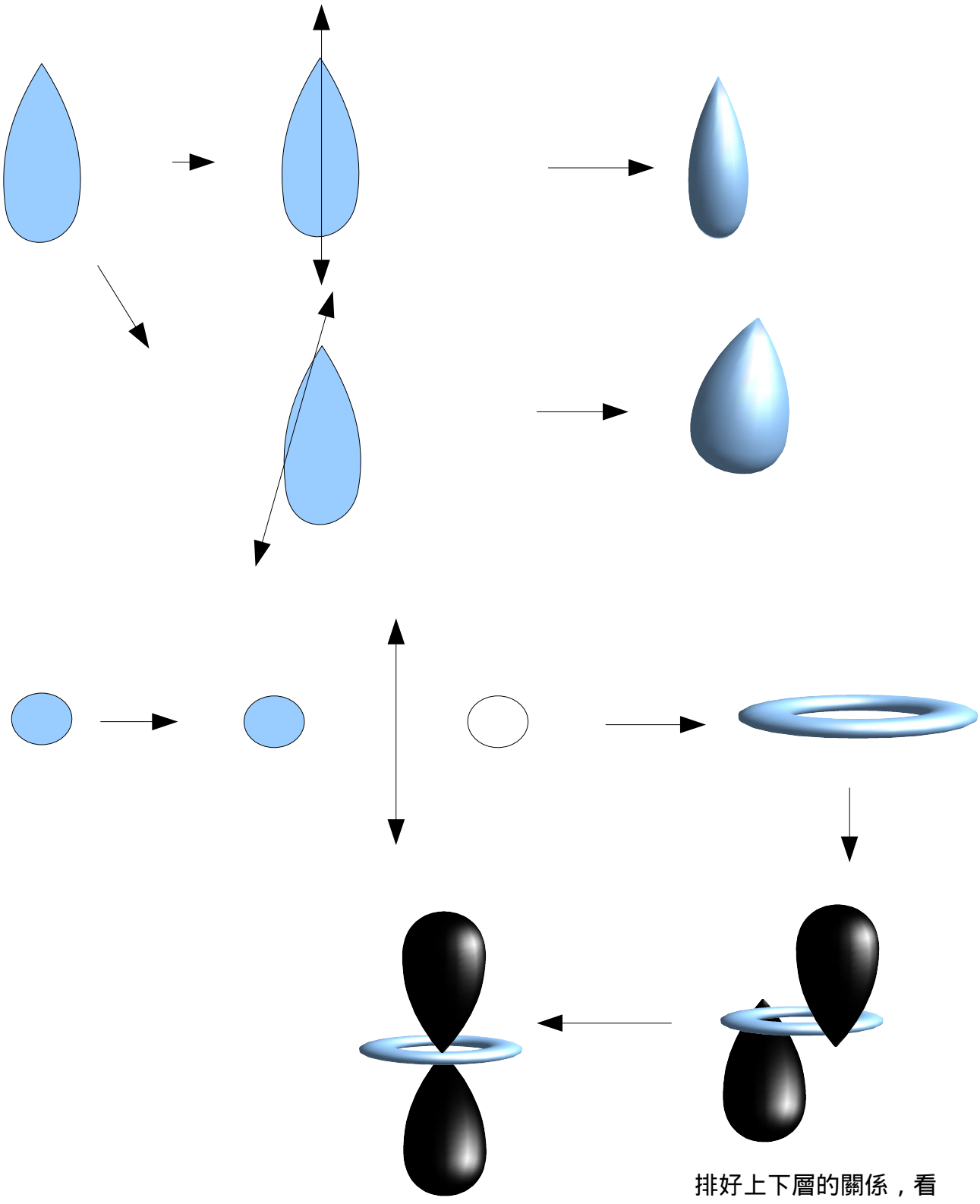

Y
X

軌域

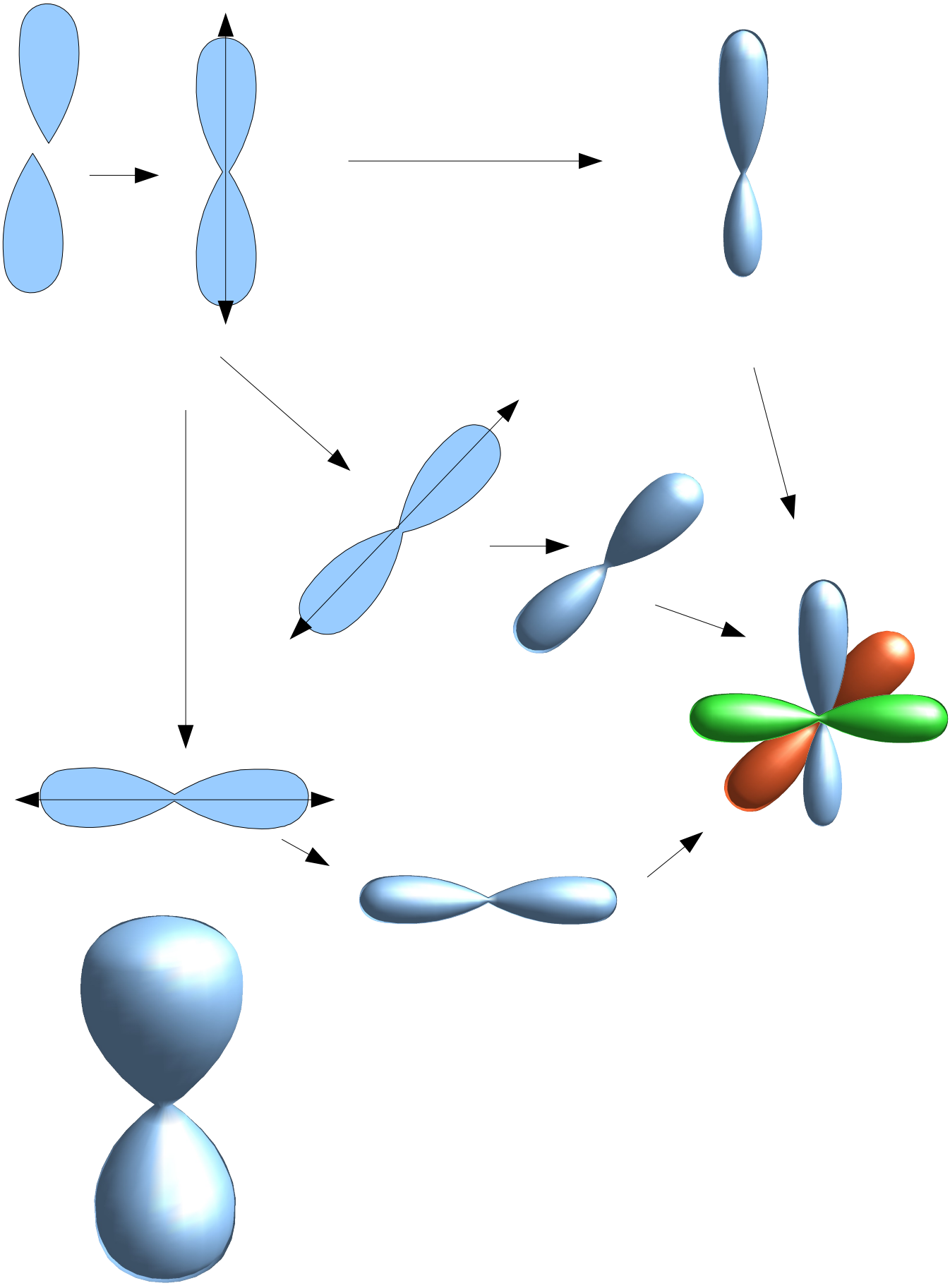
效果 > 變成 3 D 圖形

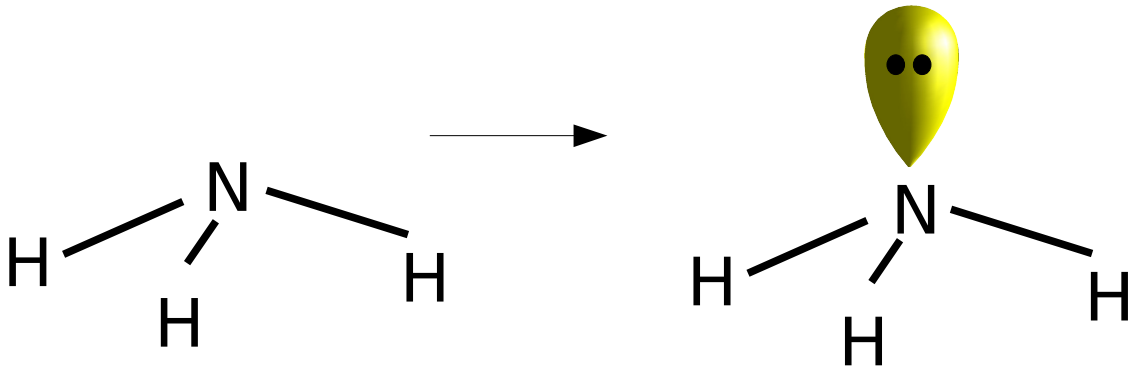
Key

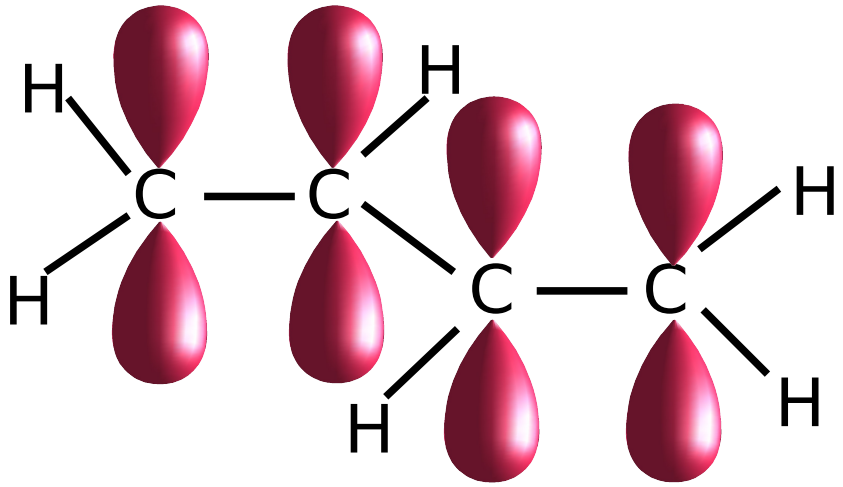
1. 先移動旋轉軸，儘量與原圖形完全重疊（或略為傾斜）
2. 按下滑鼠右鍵就完成



排好上下層的關係，看起來是穿越圓環




N
H
H
H
N
H
H
H


H
H
C
C
H
C
C
H
H
H
H