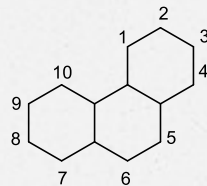


Nomenclatura de los sistemas heterocíclicos fusionados



Heterociclo fusionado con una parte homocíclica

- o Heterociclo → componente base.
- o Homociclo → anillo sustituyente o secundario [2°] → **prefijo**.
- o Heterociclo → Se asignan letras a los lados (caras) considerando la numeración convencional.
- o Fusión → [*letra minúscula que corresponde a la unión de la cara del heterociclo*].

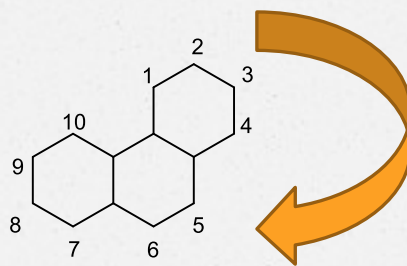
Heterociclo fusionado con un homociclo

- o Una vez que se elije y etiquetan las caras del sistema base, se numeran los átomos del anillo 2° como si fuera independiente.
- o Al anillo 2° le corresponde la menor numeración posible; así se puede establecer la asignación de caras.



Sistema base con más de un anillo

- o La numeración inicia por el anillo superior situado a la derecha y continúa sin tomar en cuenta las uniones de los demás anillos.



Si los dos anillos fusionados son heterociclos

- o La fusión se indica por medio de caras para los sistemas base y con números arábigos para los 2°.
- o Cuando hay N, éste será el sistema base.
- o Si el heteroátomo no es N, la preferencia se realiza de acuerdo con el sistema Häntzsch-Widman.

Tablas → Prefijos (Sistema Hantzsch-Widman)

Elemento	Valencia	Prefijos
F	I	Fluora
Cl	I	Clora
Br	I	Broma
I	I	Yoda
O	II	Oxa
S	II	Tia
Se	II	Selena
N	III	Aza

Tablas → Prefijos

Compuesto	Prefijo
Ciclopentano	Ciclopentan
Ciclohexano	Ciclohexan
Benceno	Benzo
Furano	Furo
Tiofeno	Tieno
Pirrol	Pirro
imidazol	imidazo

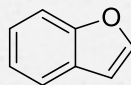
Si los dos anillos fusionados son heterociclos → se da preferencia a

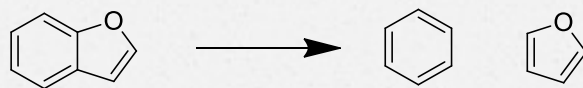
- o Compuesto con más anillos.
- o Heterociclo más grande.
- o Compuesto con más heteroátomos, aunque no sea N.
- o Compuesto con la mayor variedad de heteroátomos.
- o La prioridad para asignar el heterociclo base: F > Cl > Br > I > O > S > Se > Te .
- o Cuando hay similitud en el tamaño del anillo, número y clase de heteroátomos → se elige al que corresponda la menor numeración.

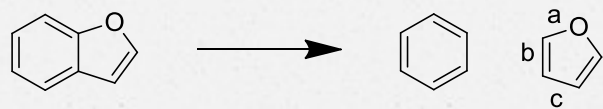
Otro caso

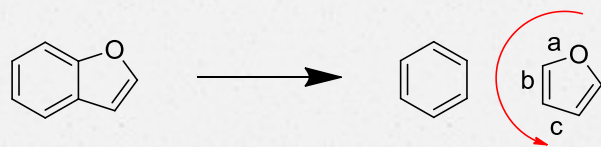
- o Si una posición de fusión está ocupada por un heteroátomo, los nombres se escogen de tal forma que ambos anillos contengan dicho átomo.

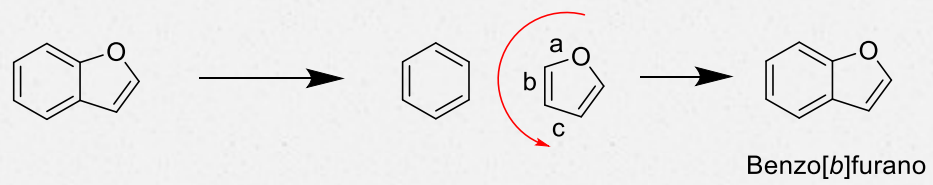
Ejemplos:



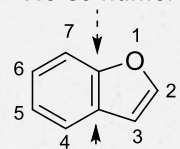






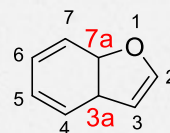


No se numeran



No se numeran

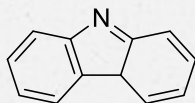
Sólo si hay
sustitución se indican



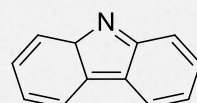
Anillos base comunes



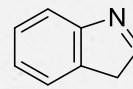
2H-Pirrol



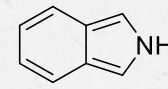
4aH-Carbazol



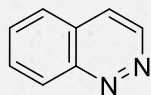
9aH-Carbazol



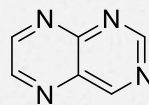
3H-Indol



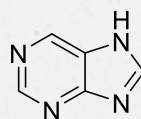
2H-Isoindol



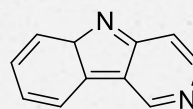
Cinolina



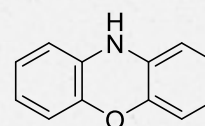
Pteridina



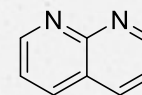
Purina



β -Carbolina



Fenoxazina



Naftiridina



Piridazina



Pirazina



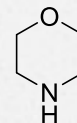
Imidazol



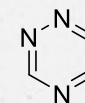
1H-Pirrol



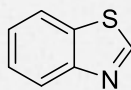
2H-Pirano

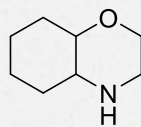


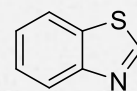
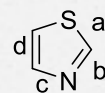
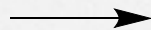
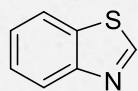
Morfolina



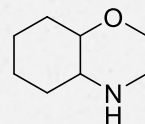
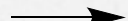
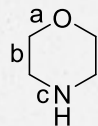
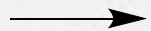
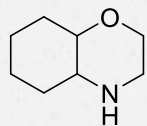
1,2,4-Triazina



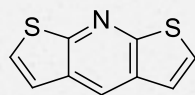


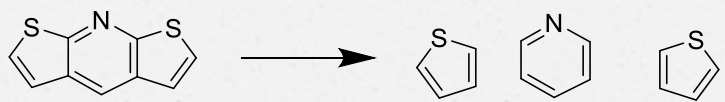


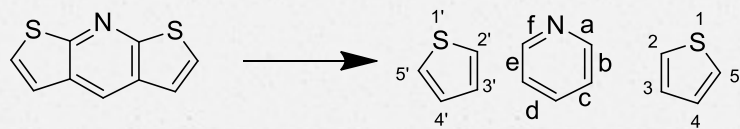
Benzo[d]tiazol

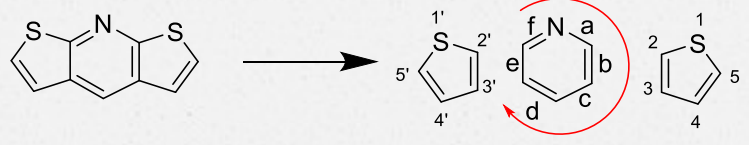


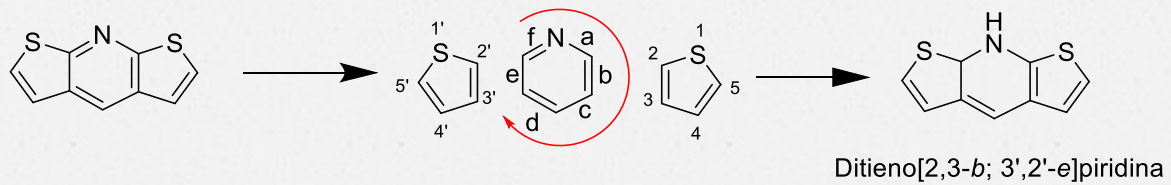
Ciclohexan[b]morfolina

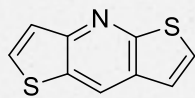


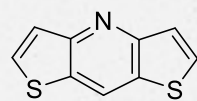


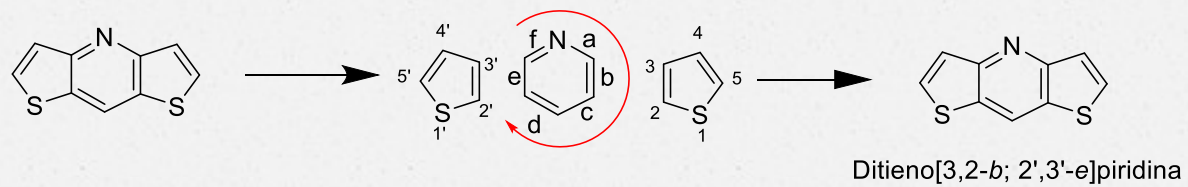
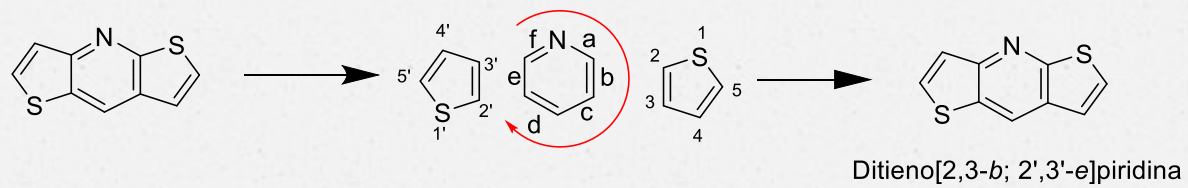
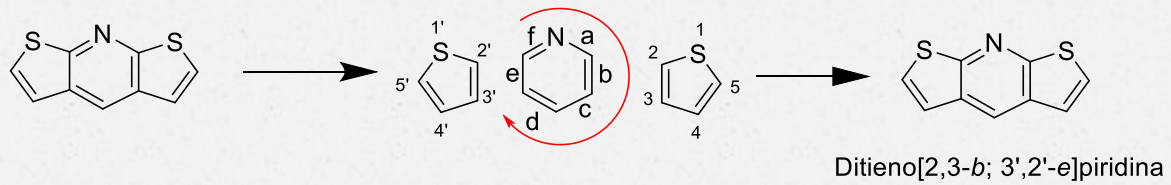


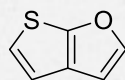


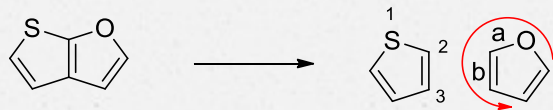


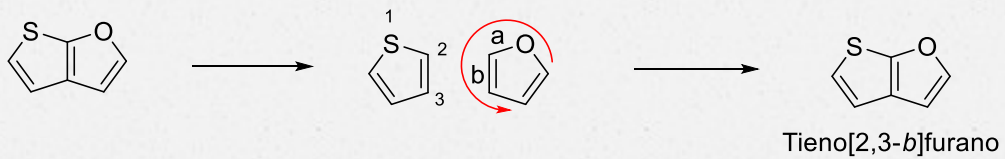


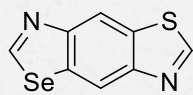


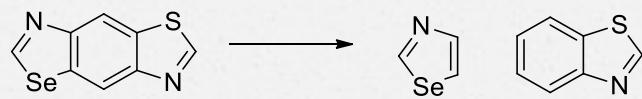


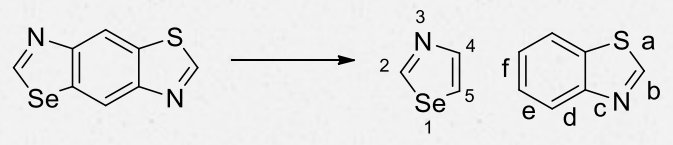


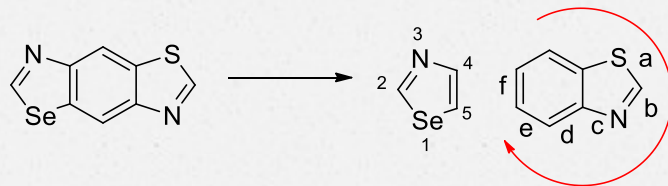


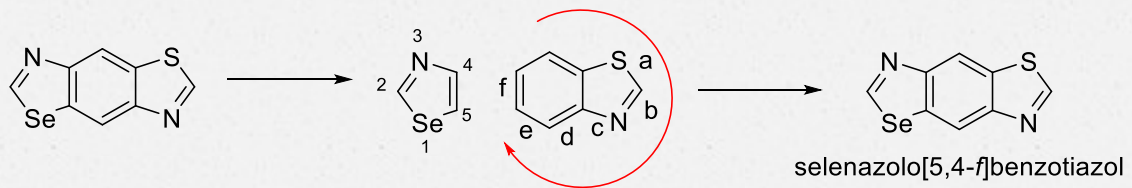


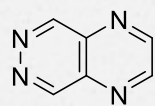


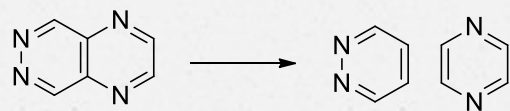


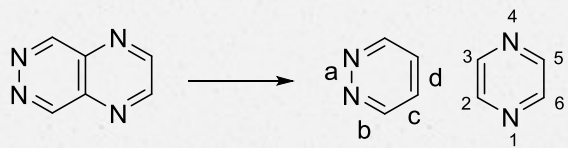


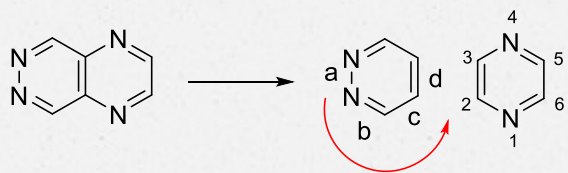


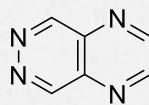




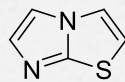


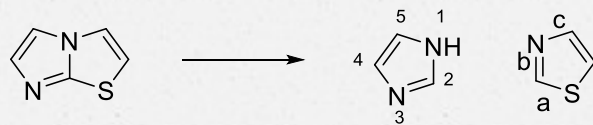


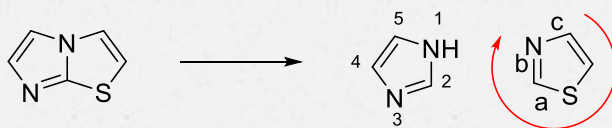


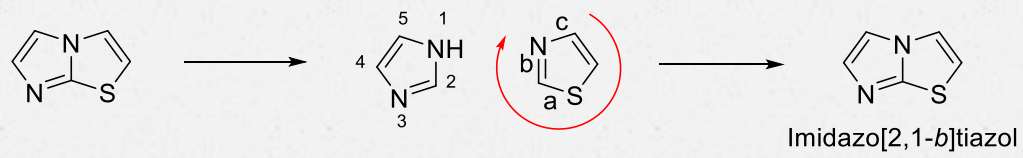


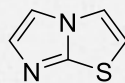
pirazino[2,3-*d*]piridazina











Imidazo[2,1-*b*]thiazol