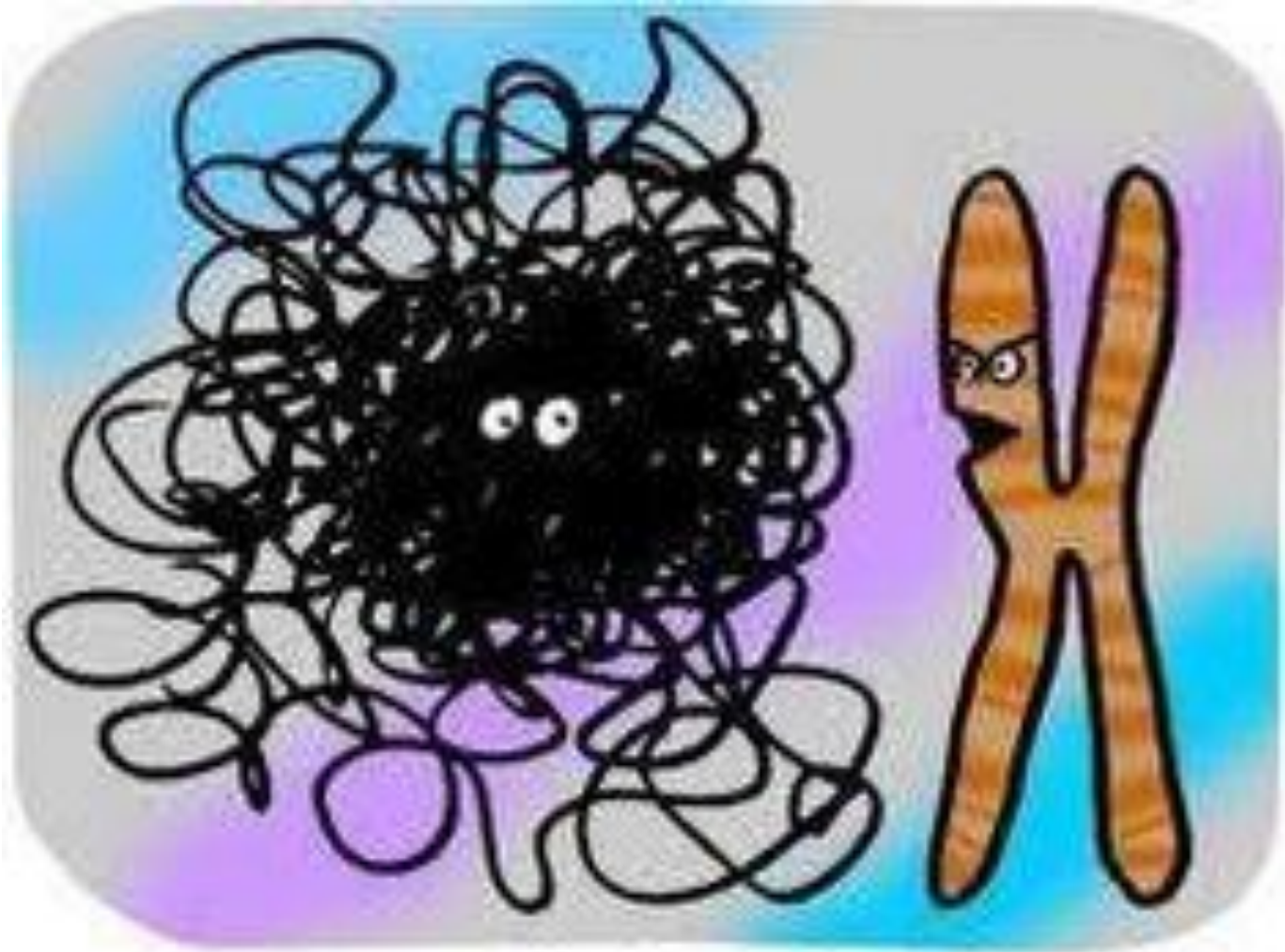
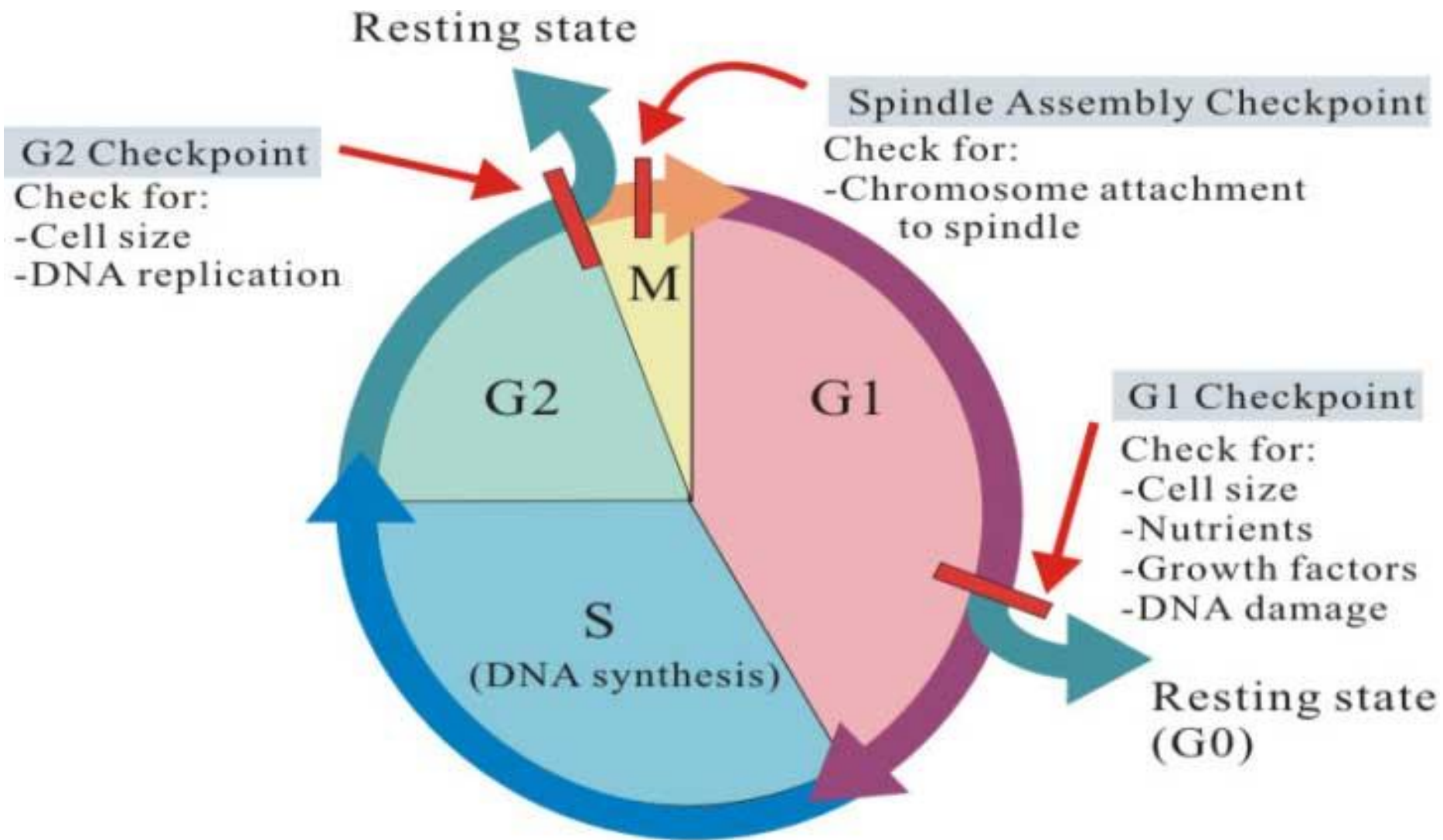
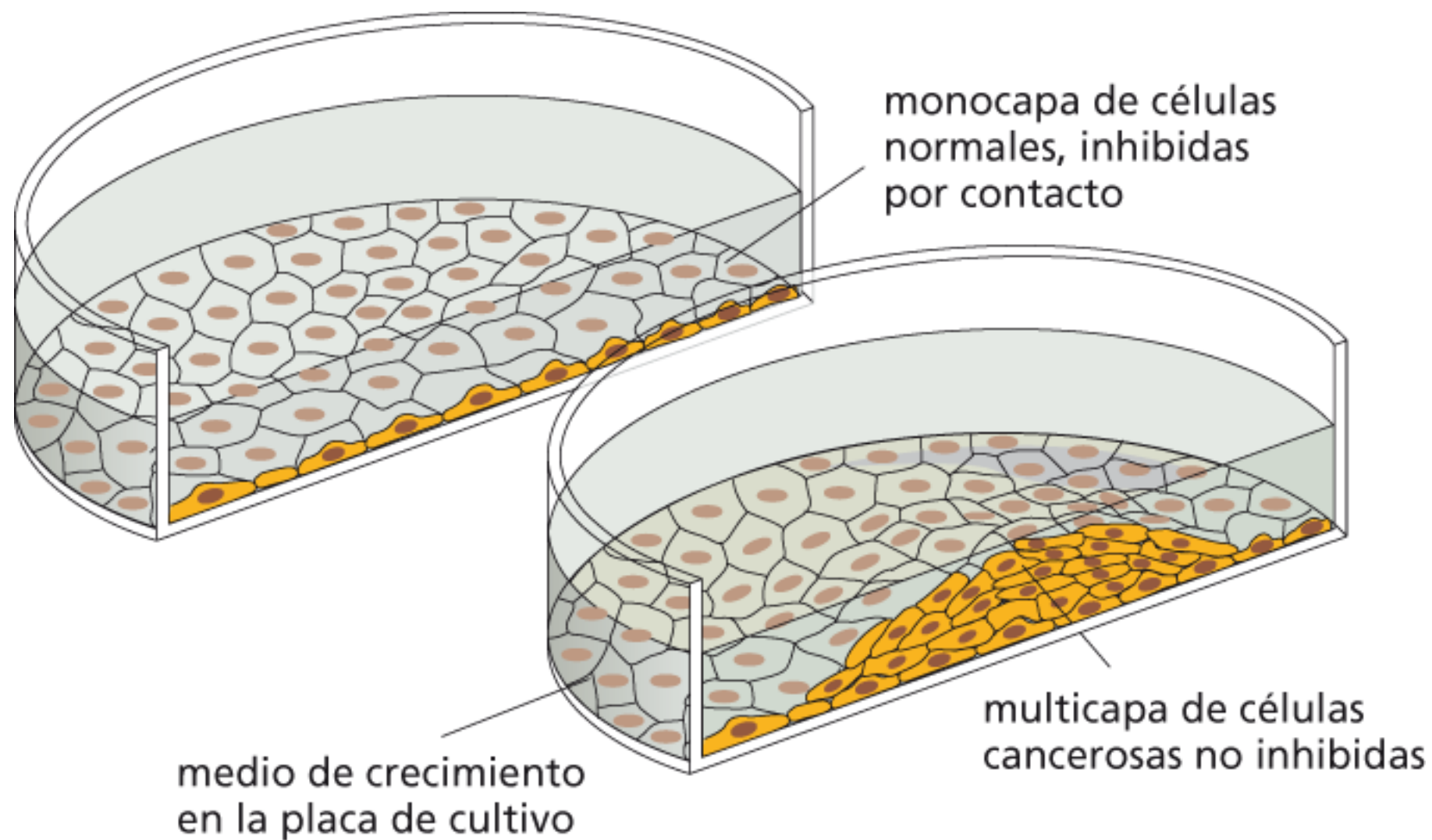


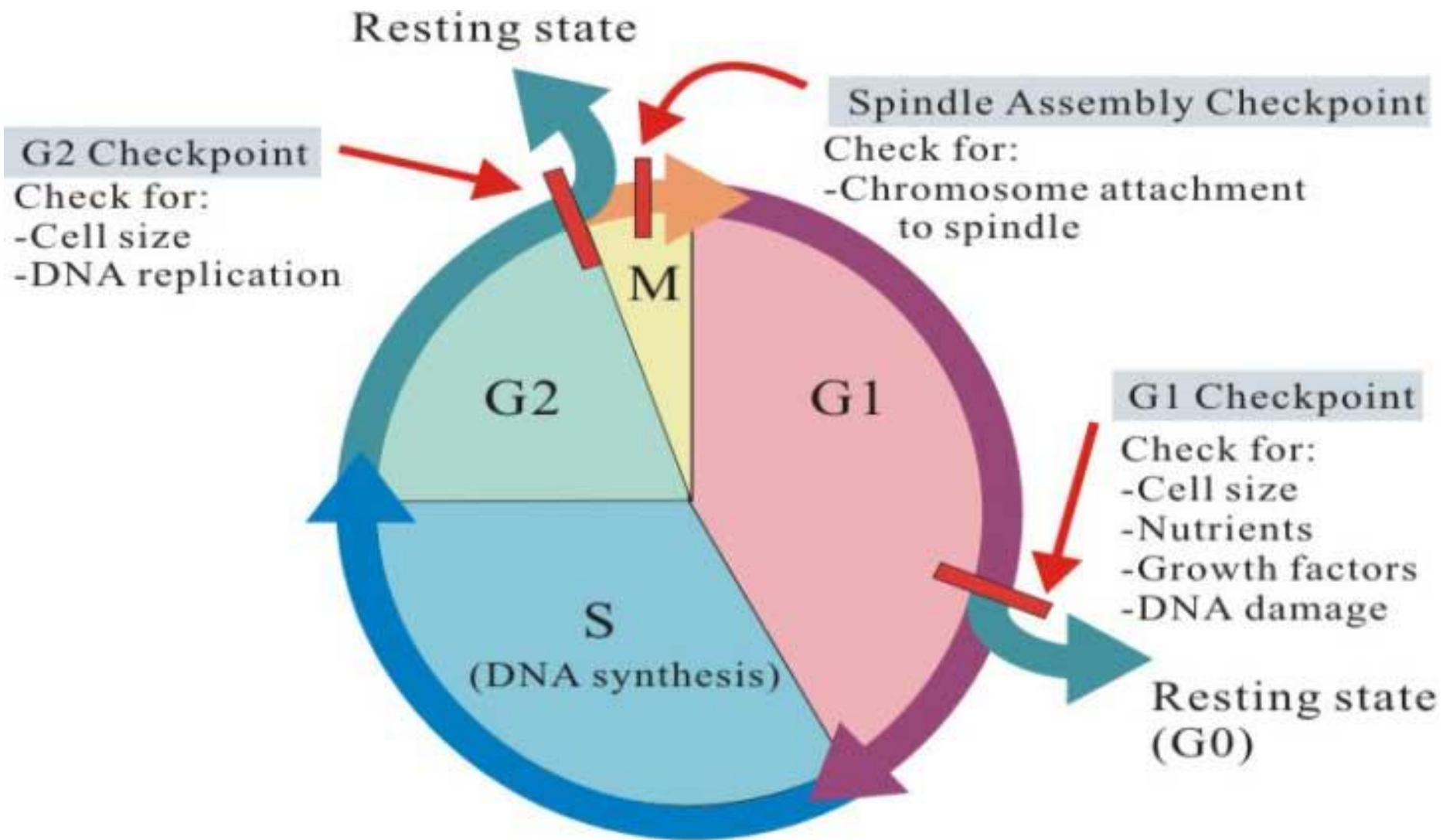
# MITOSIS



Dude, mitosis starts in five minutes...  
I can't believe you're not condensed yet.

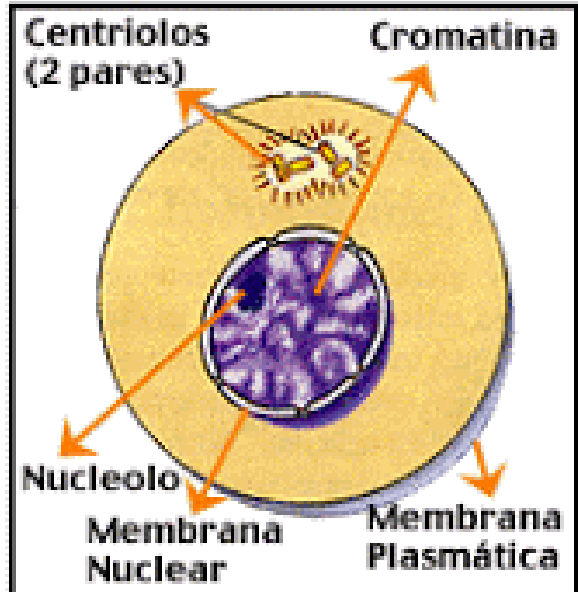




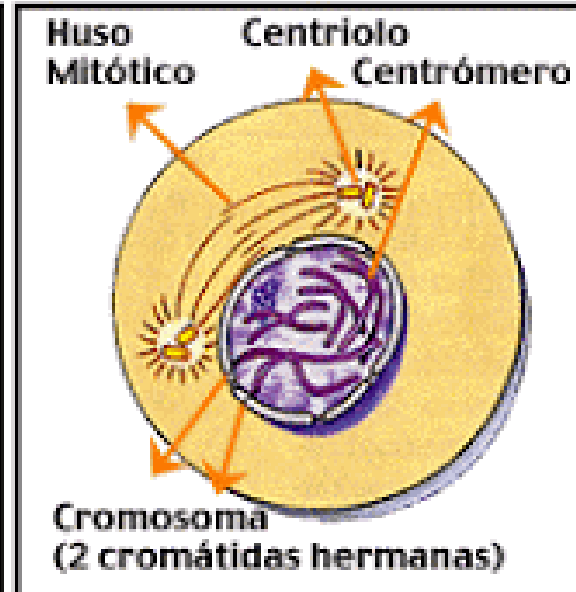


# Mitosis

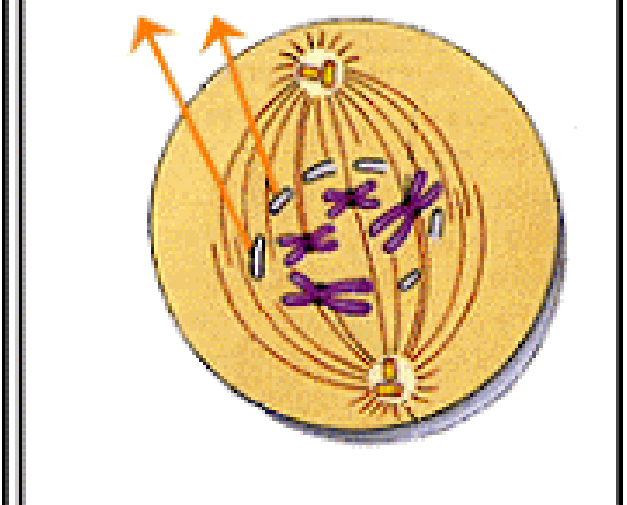
## Interfase



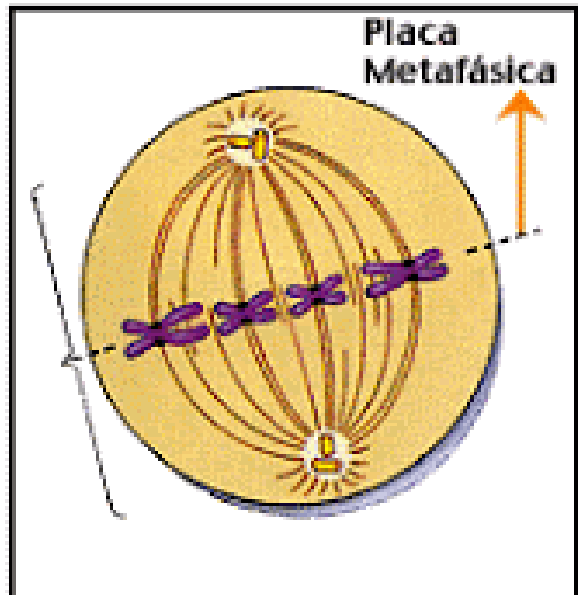
## Profase



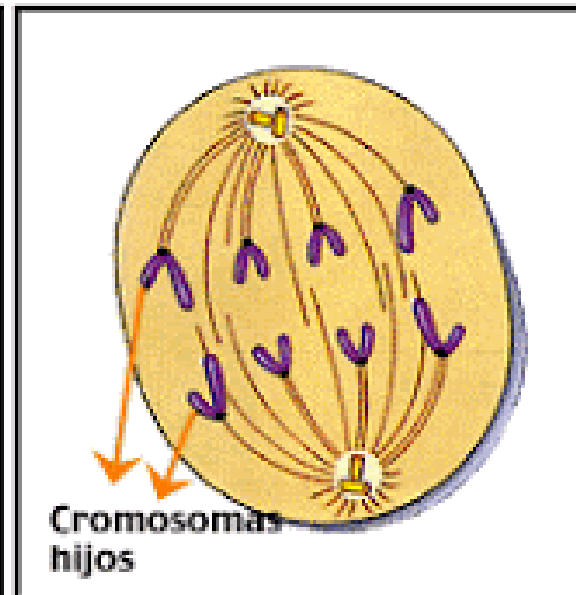
## Fragmentos de la Membrana Nuclear



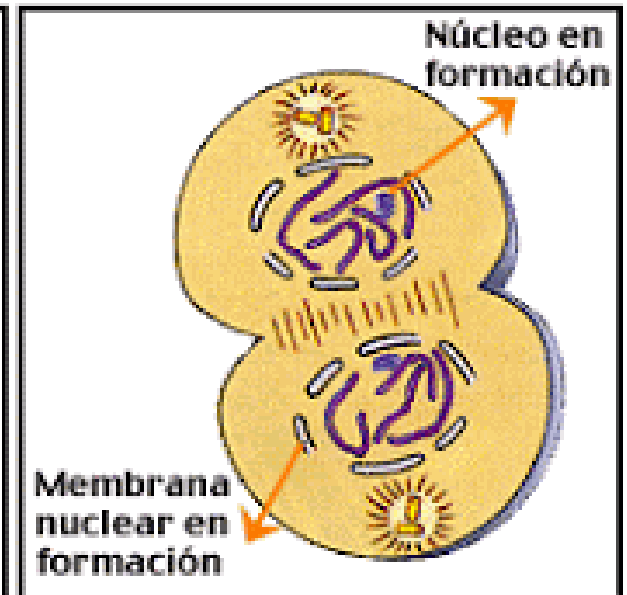
## Metafase



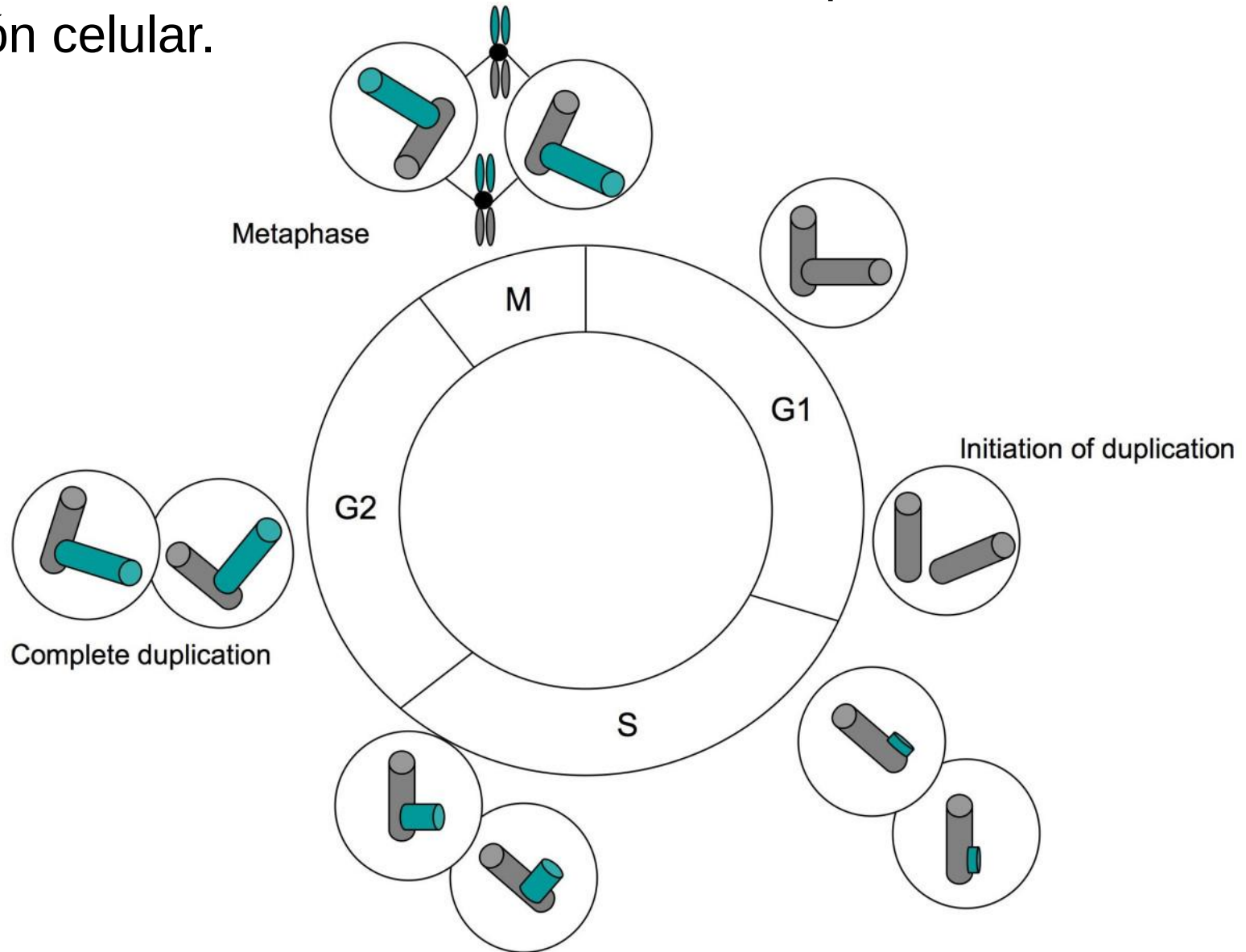
## Anafase

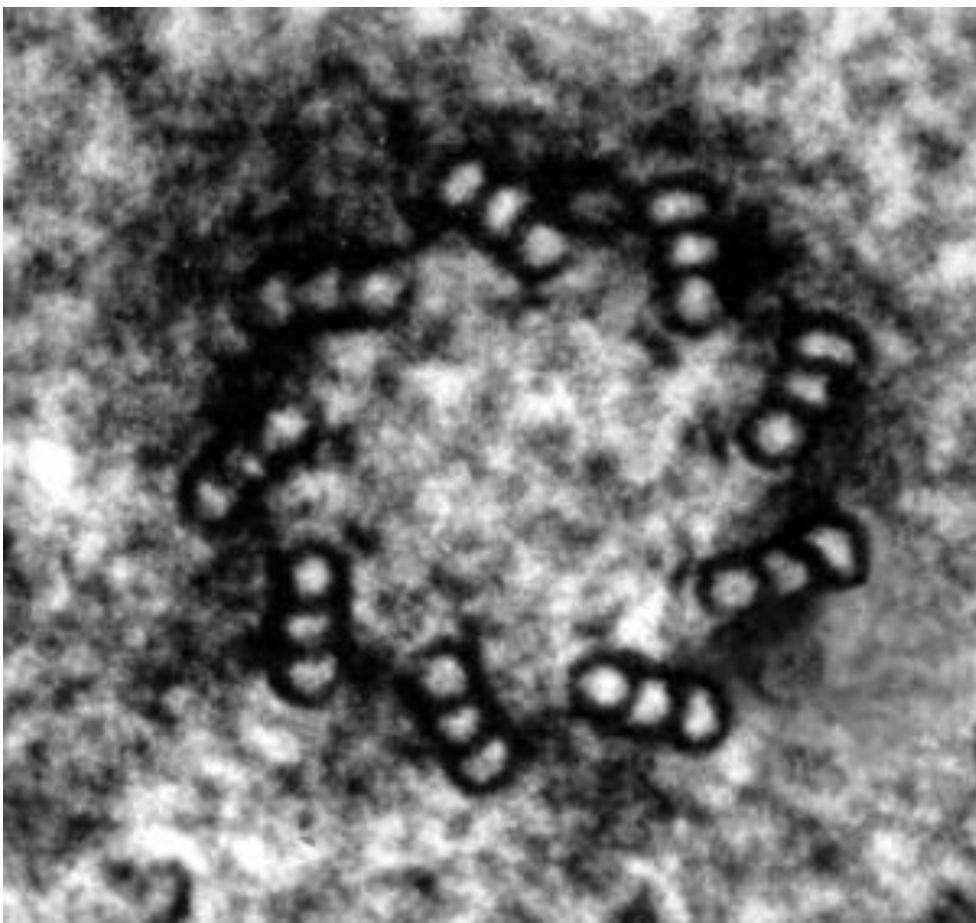
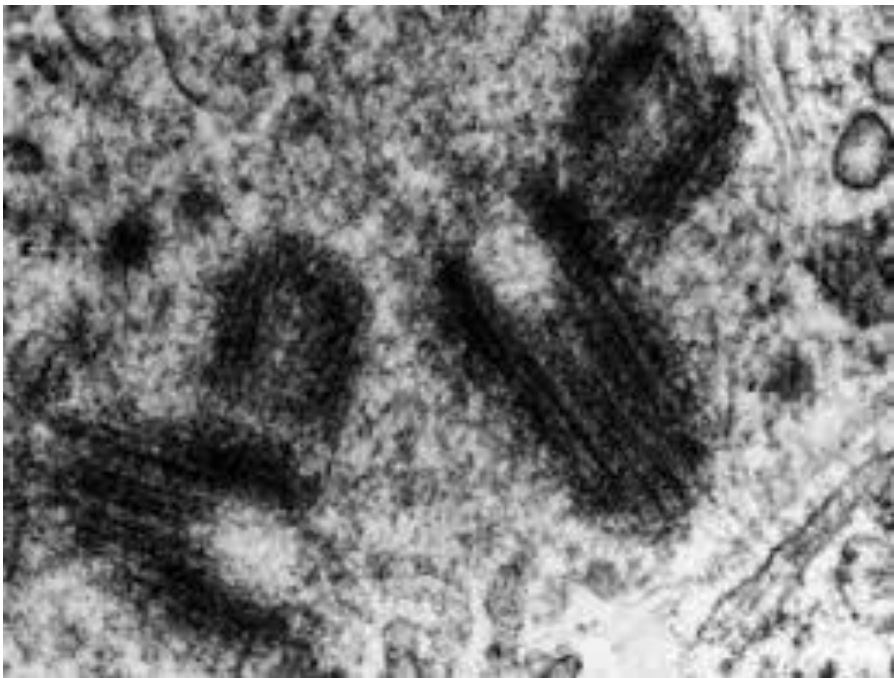


## Telofase

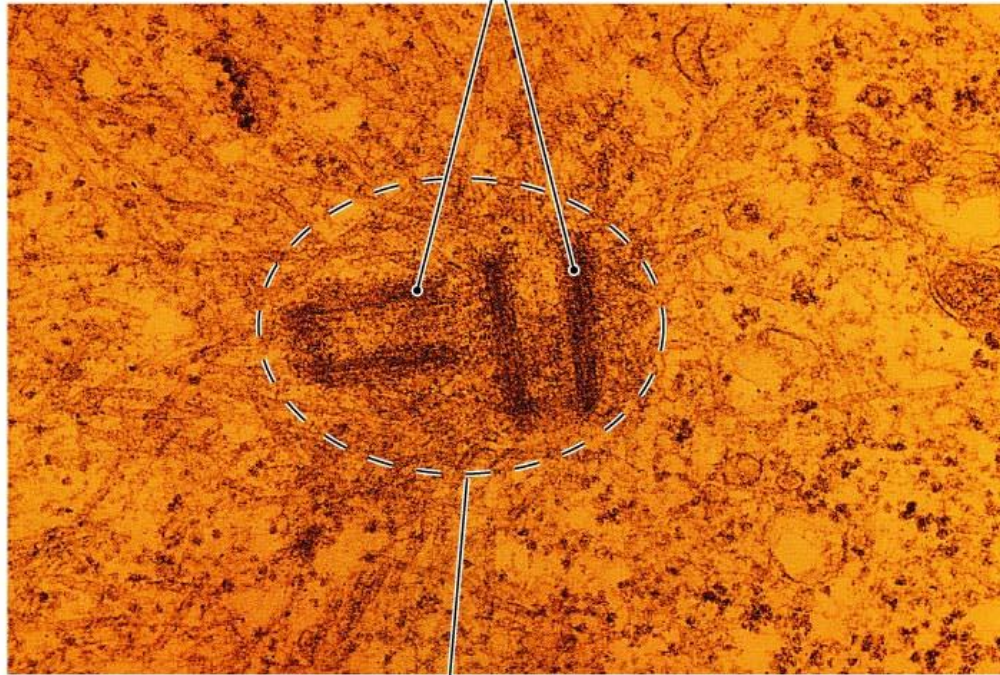


Duplicación de los centrosomas. Cada centrosoma está formado por dos centríolos que se separan en G1. A partir de cada centríolo se forman los dos centrosomas que intervienen en la división celular.





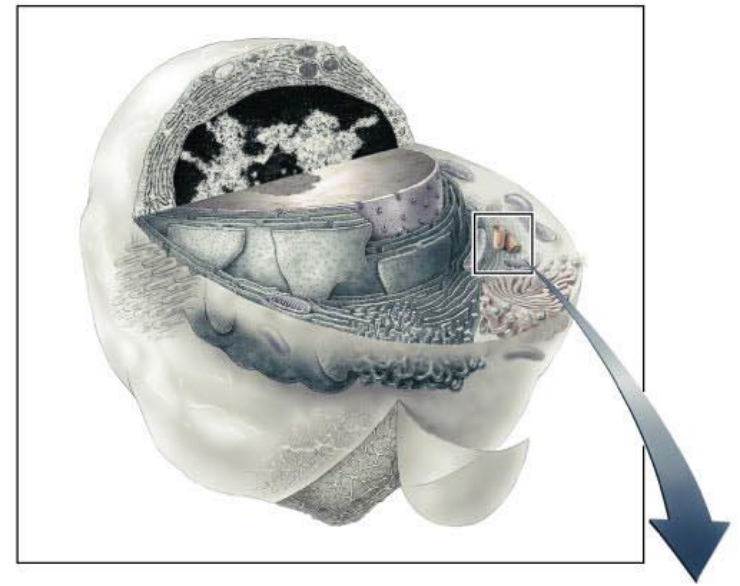
Centrioles



Centrosome

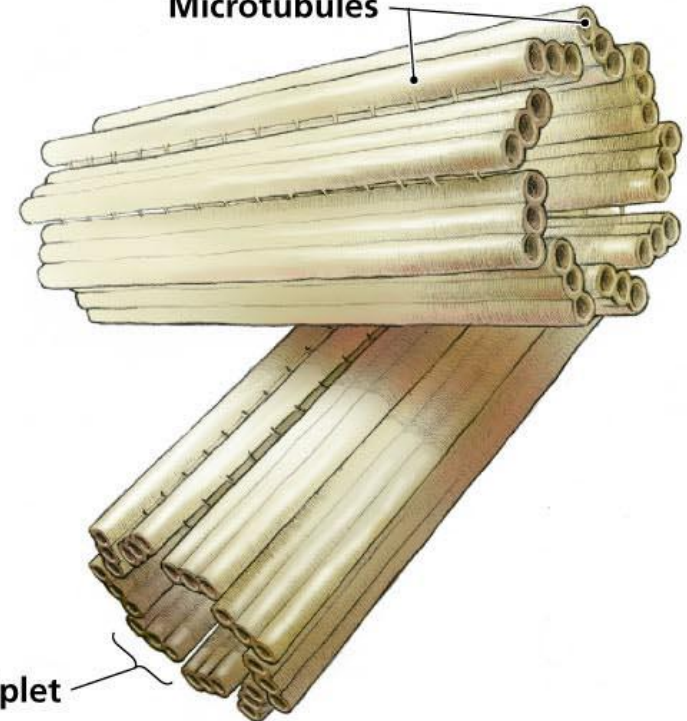
(a)

TEM 200 nm

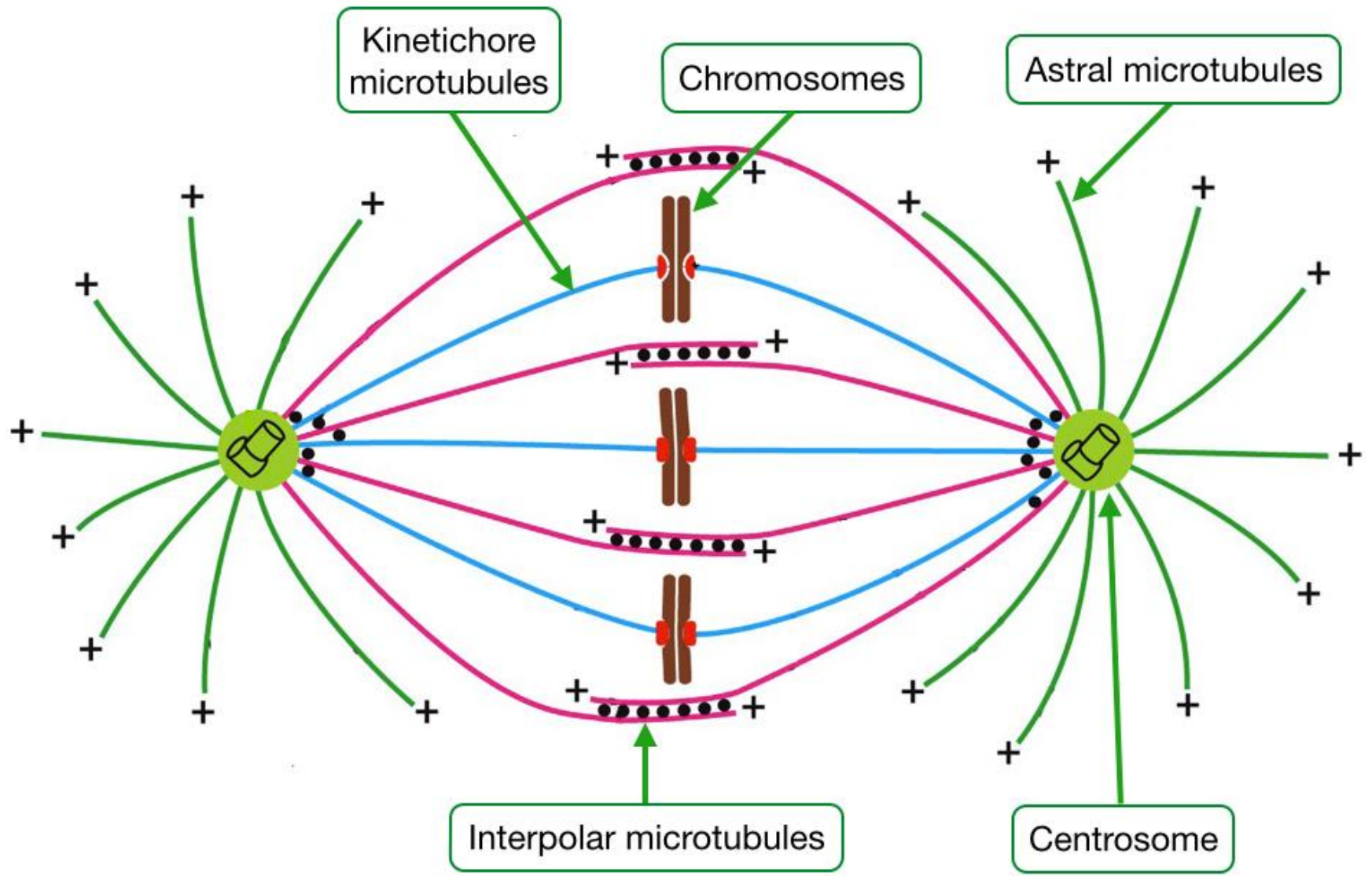


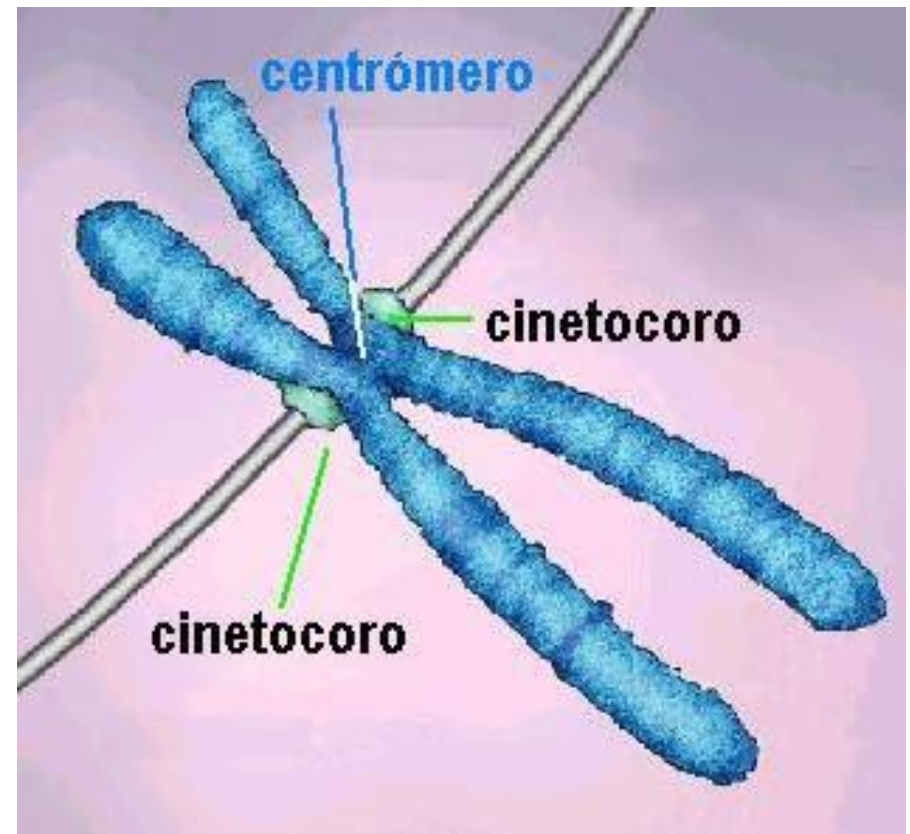
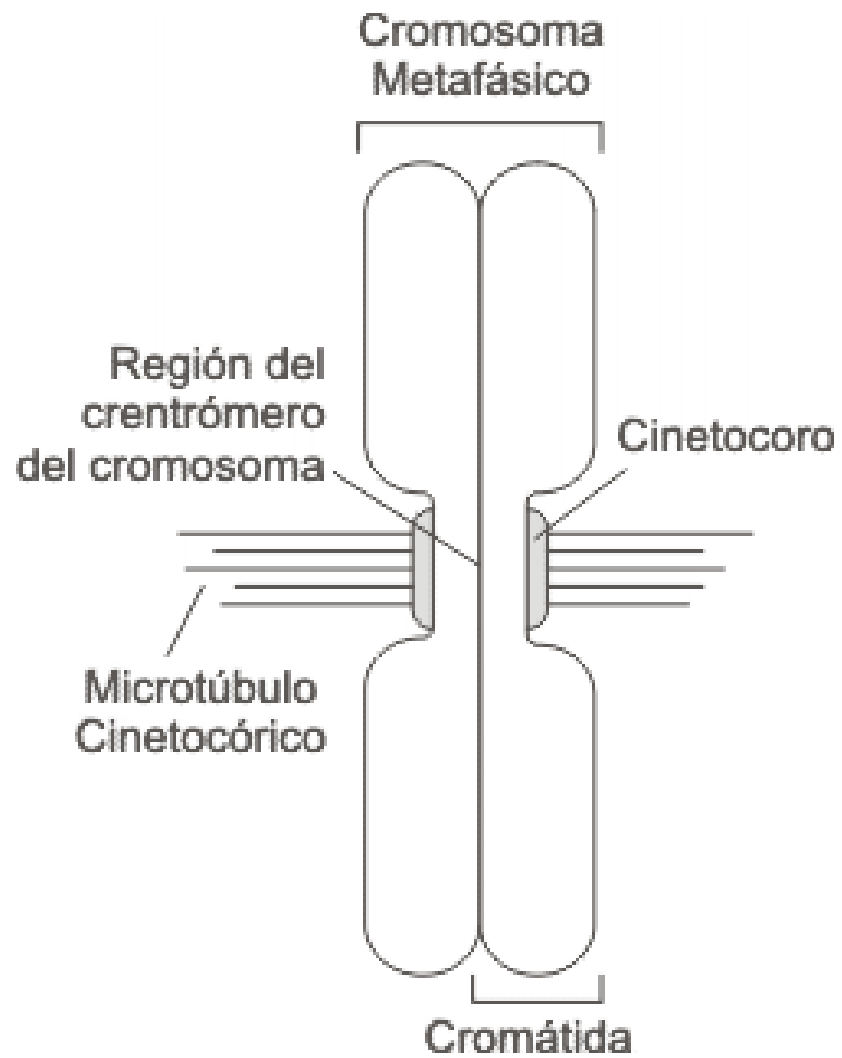
(b)

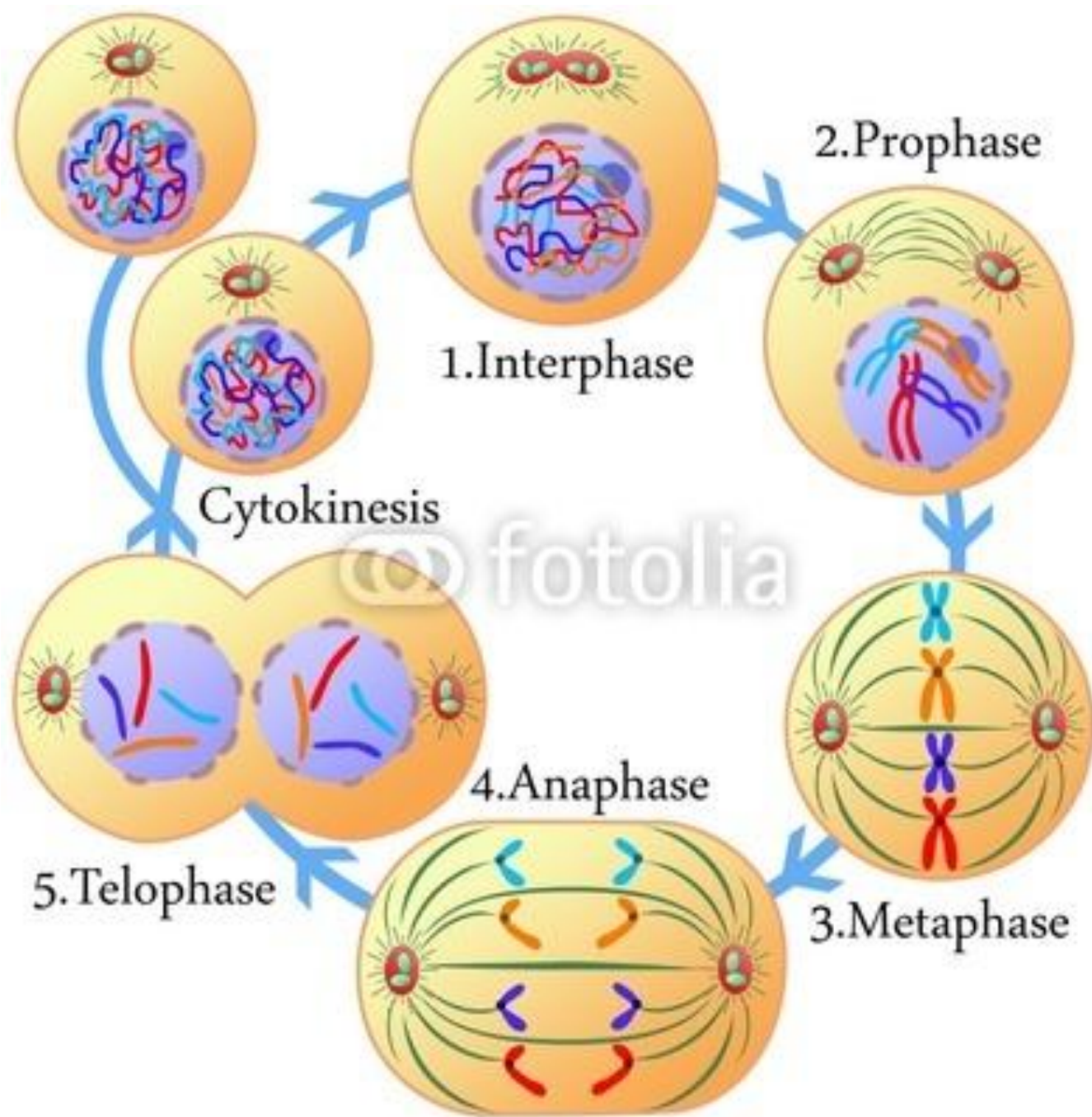
Microtubules



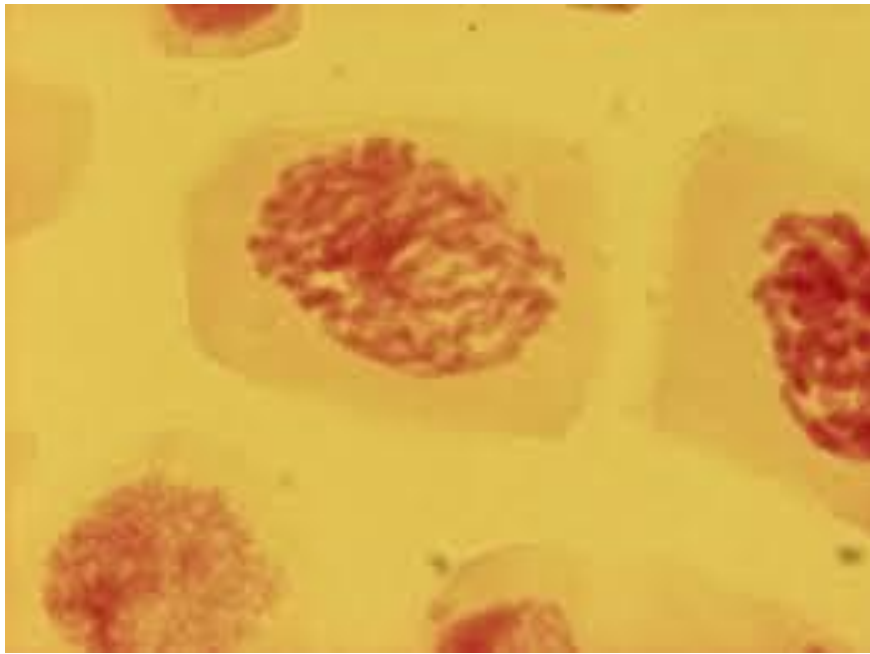
Triplet

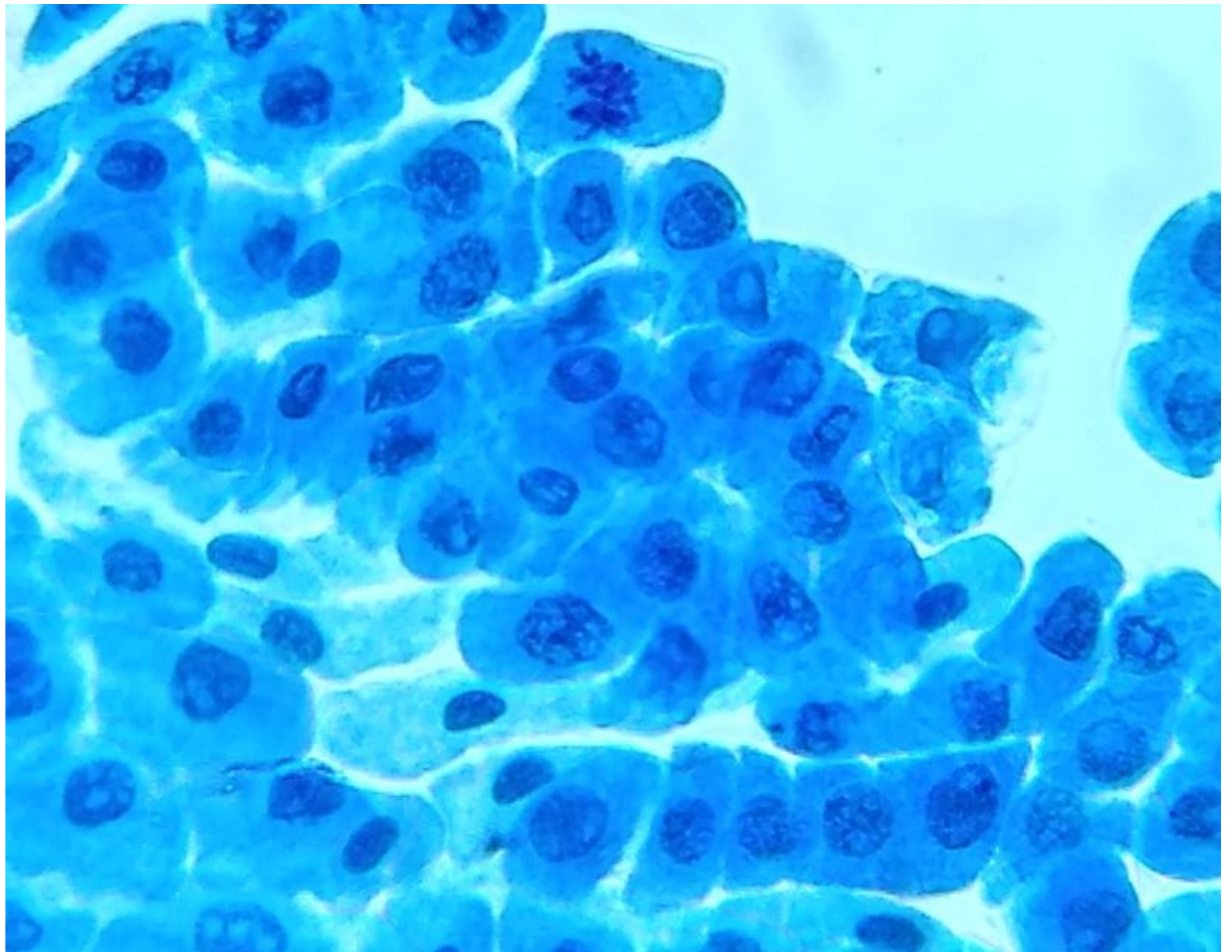




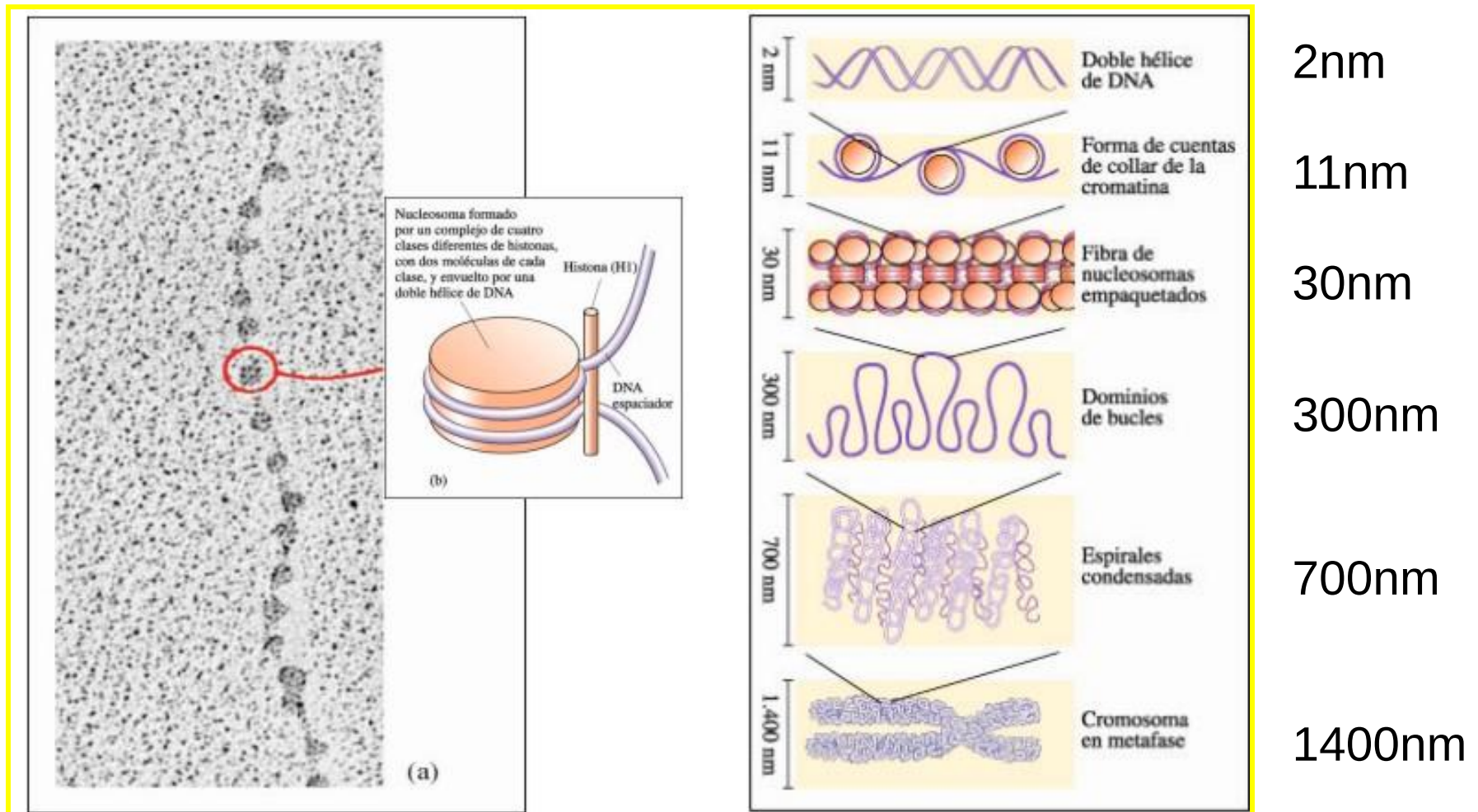


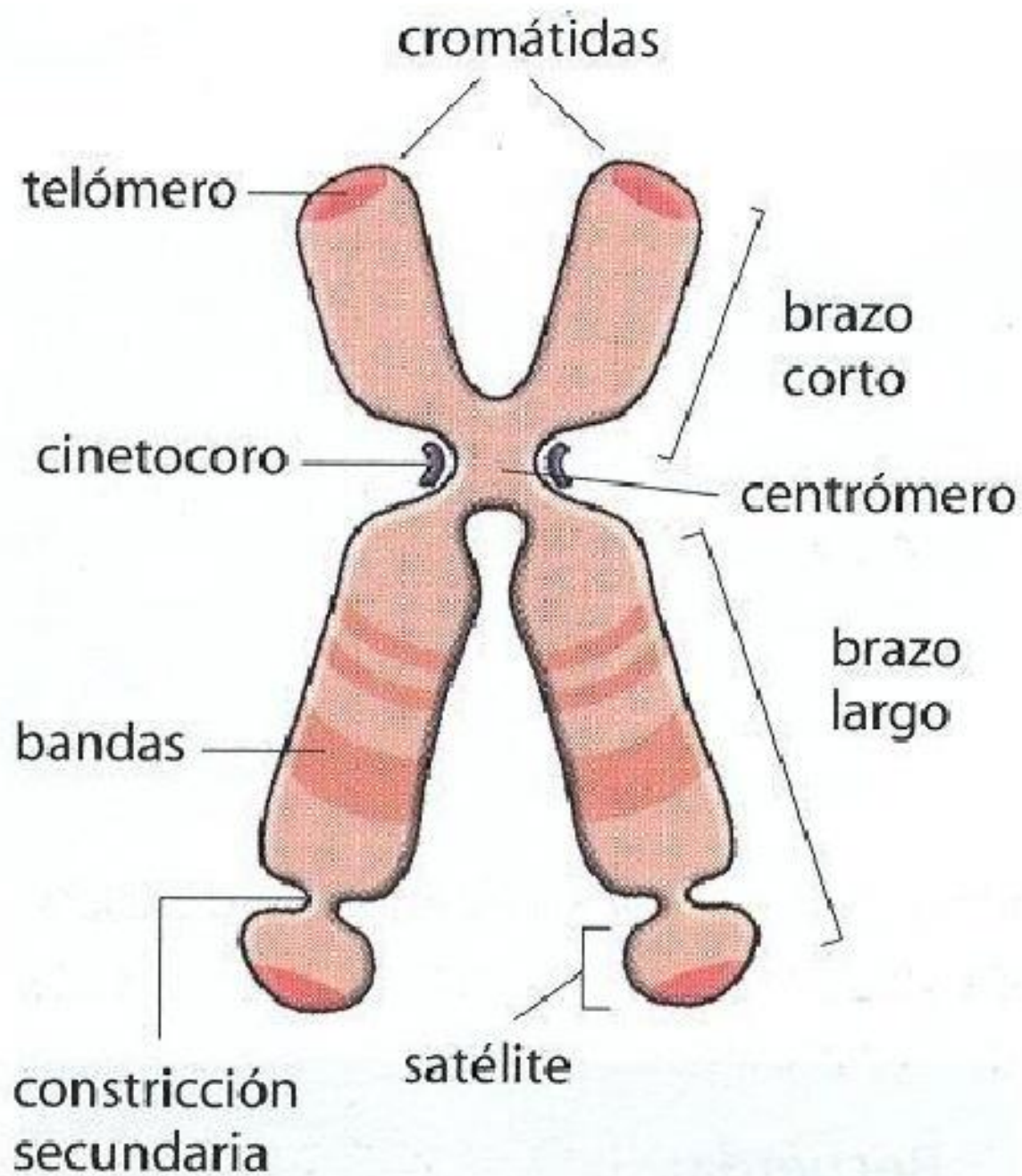
# Profase



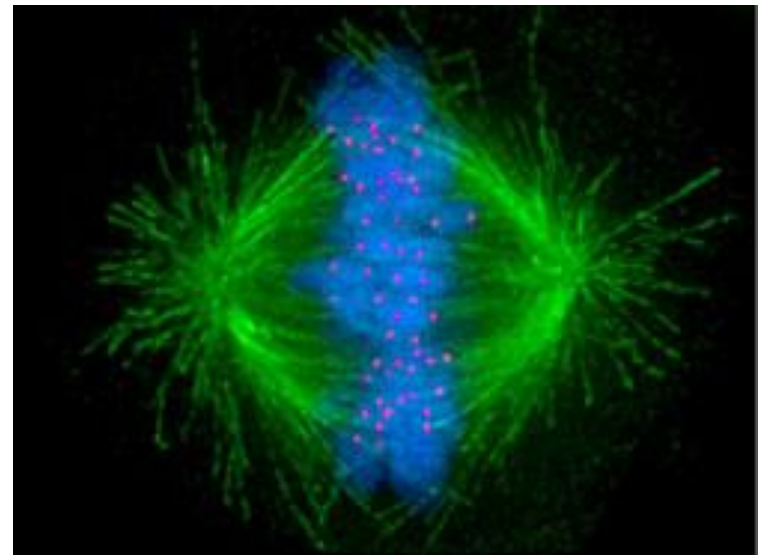


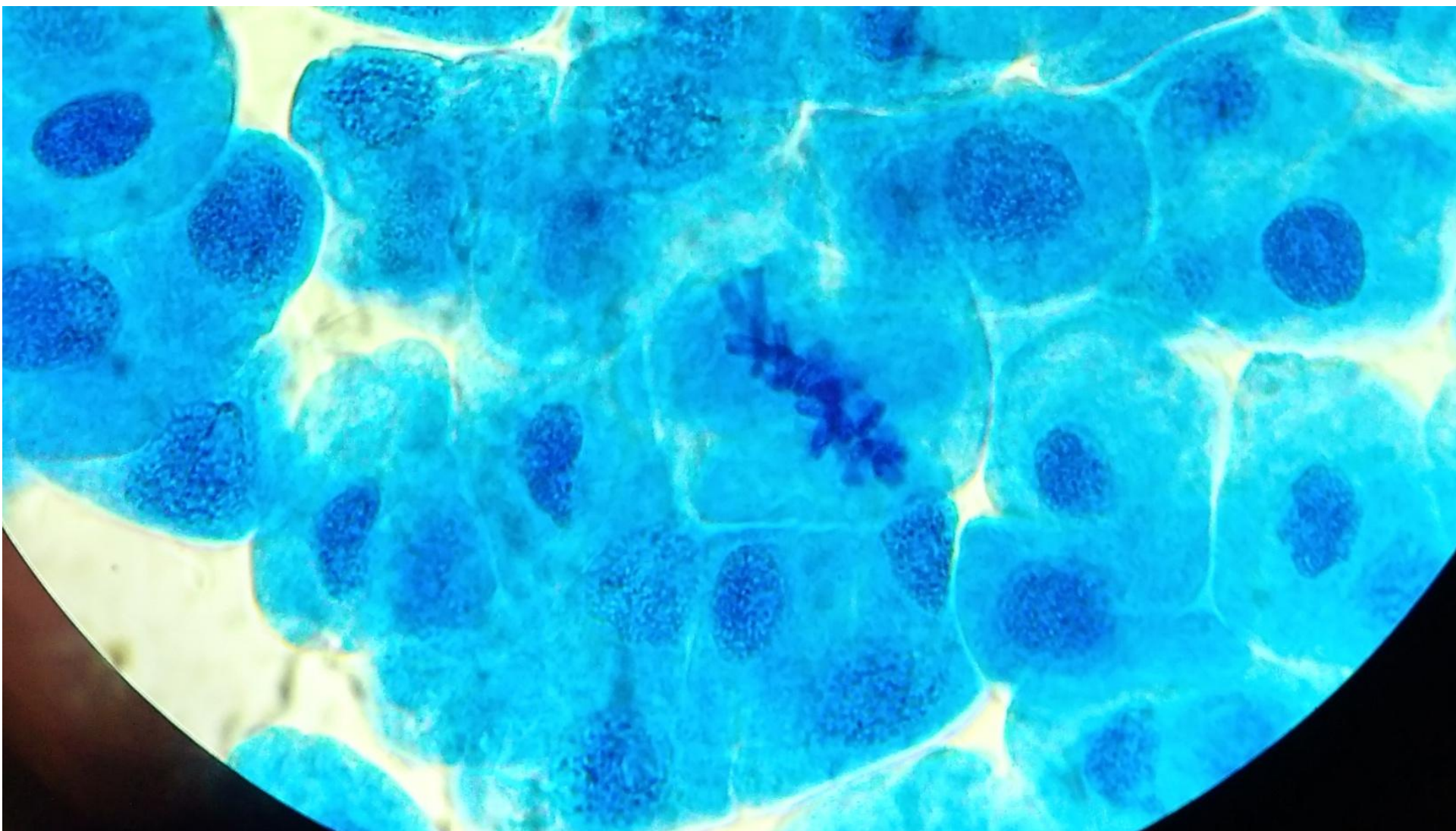
# Niveles de compactación de los cromosomas eucarióticos



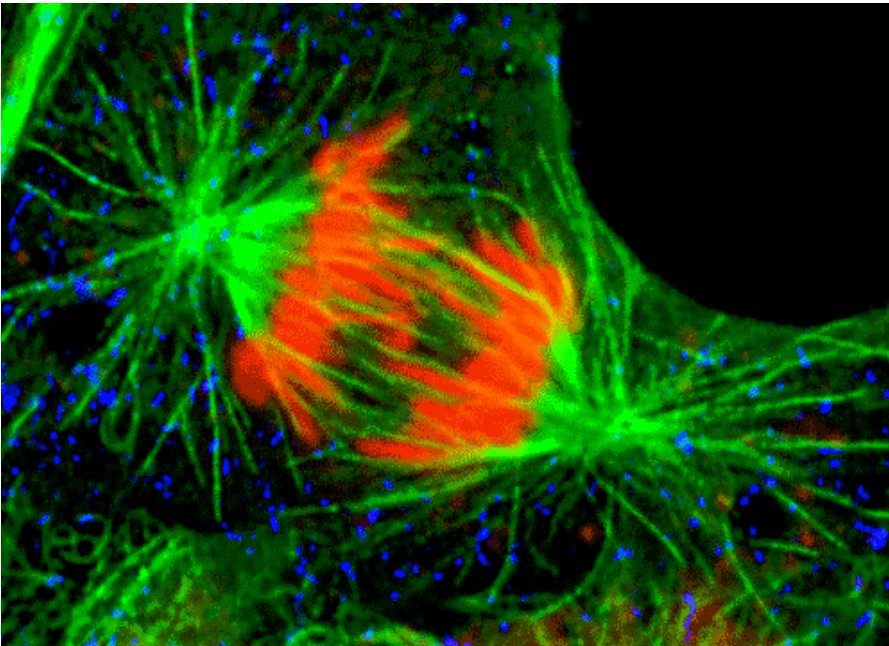
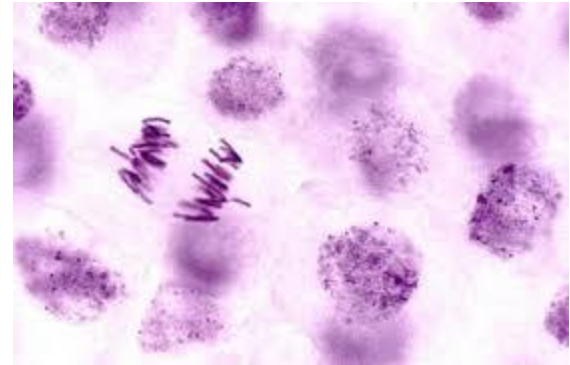
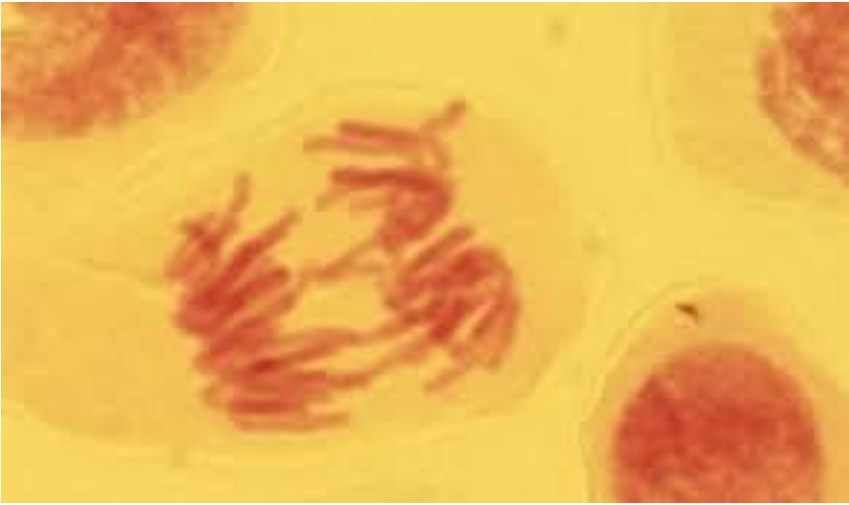


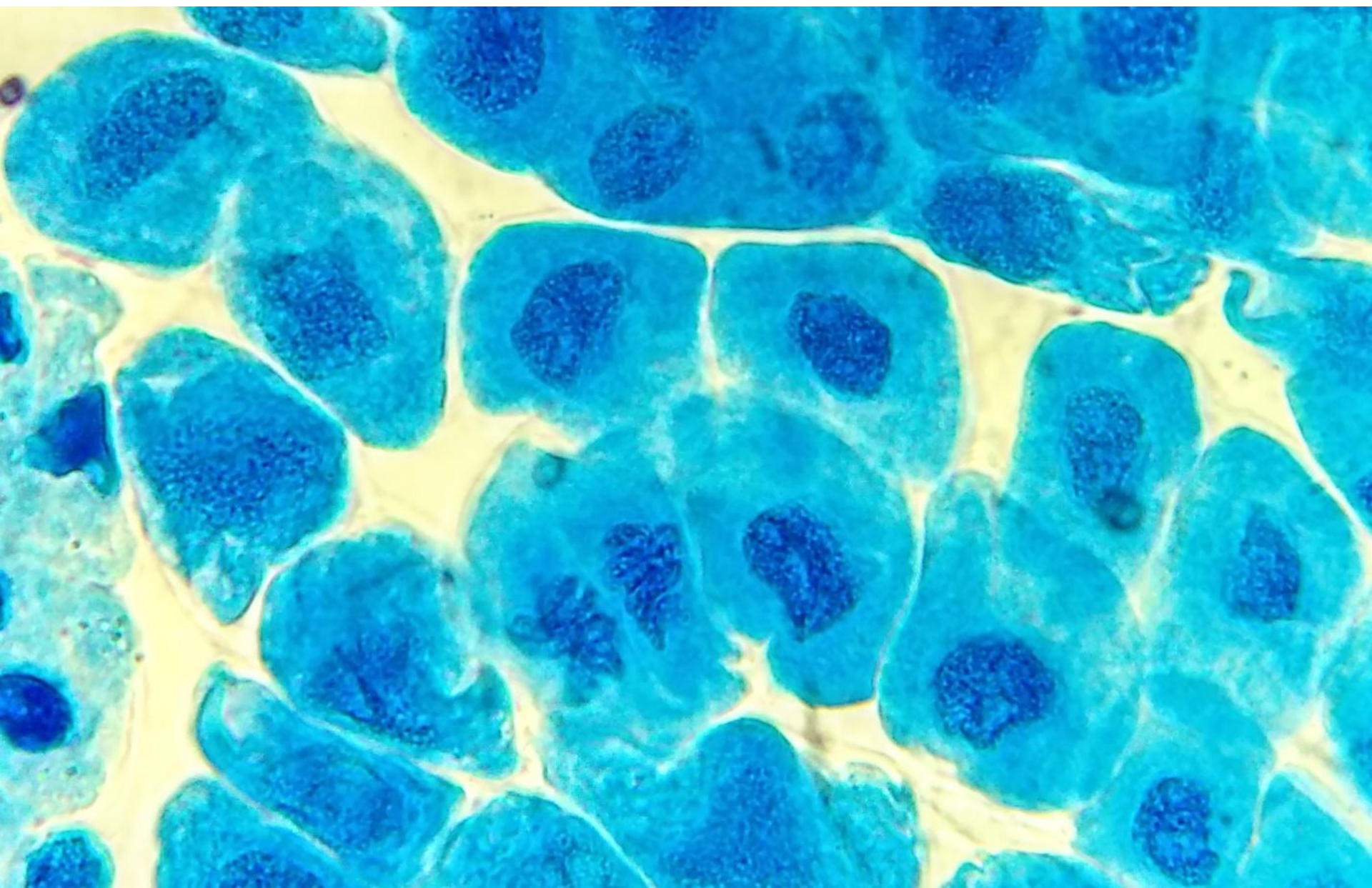
# Metafase

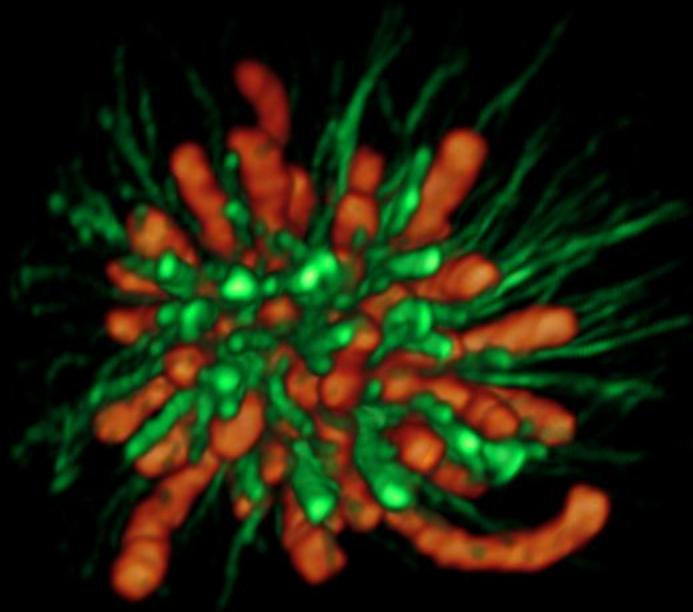
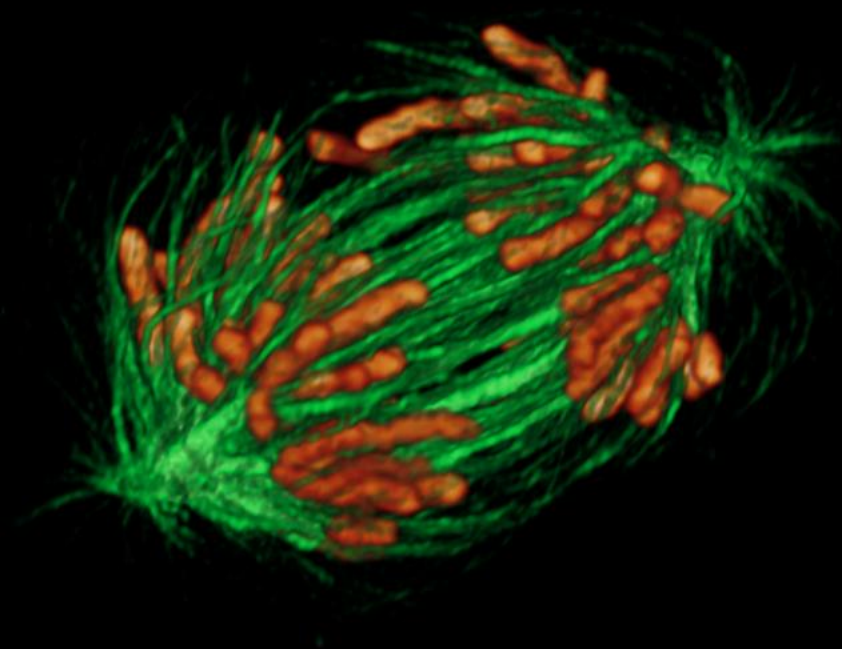
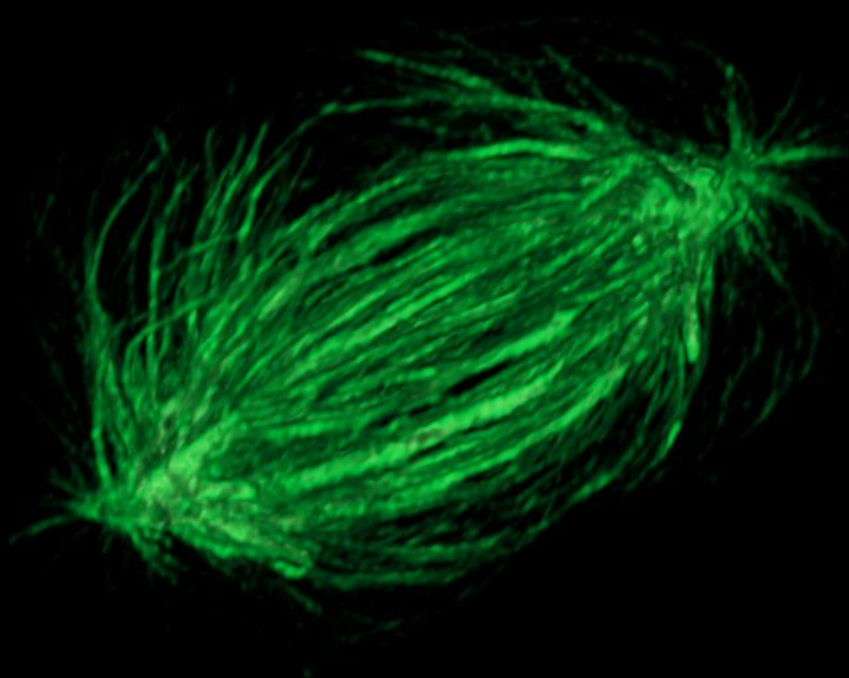
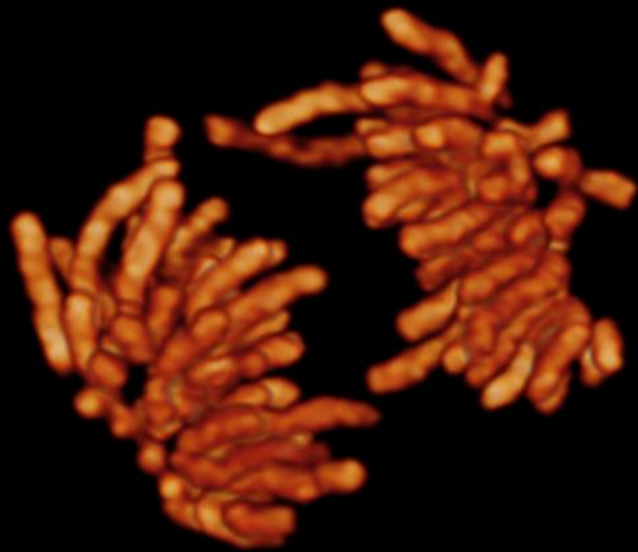




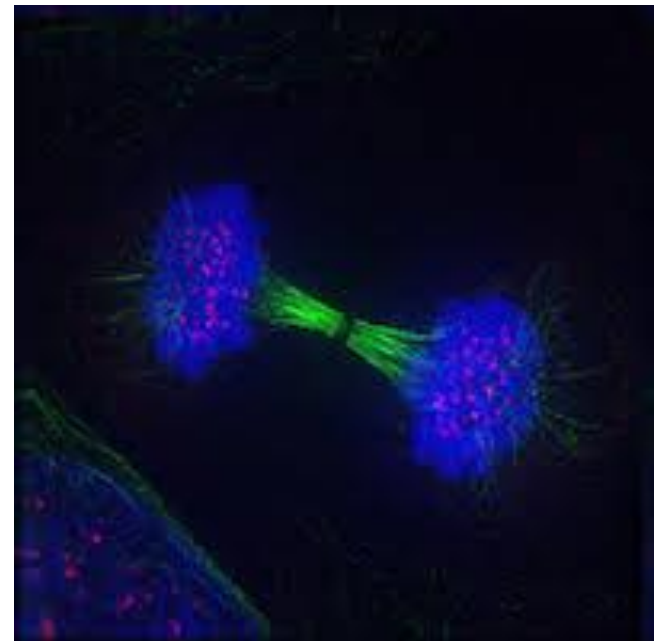
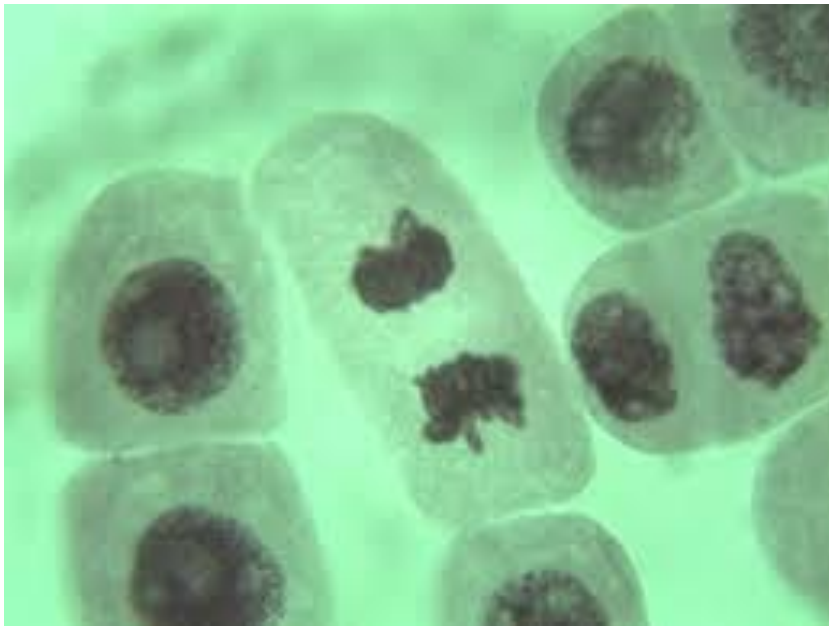
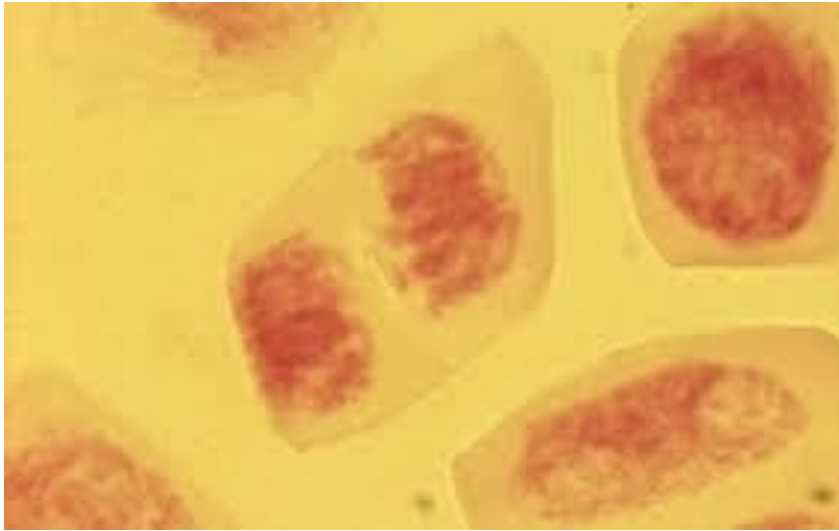
# Anafase



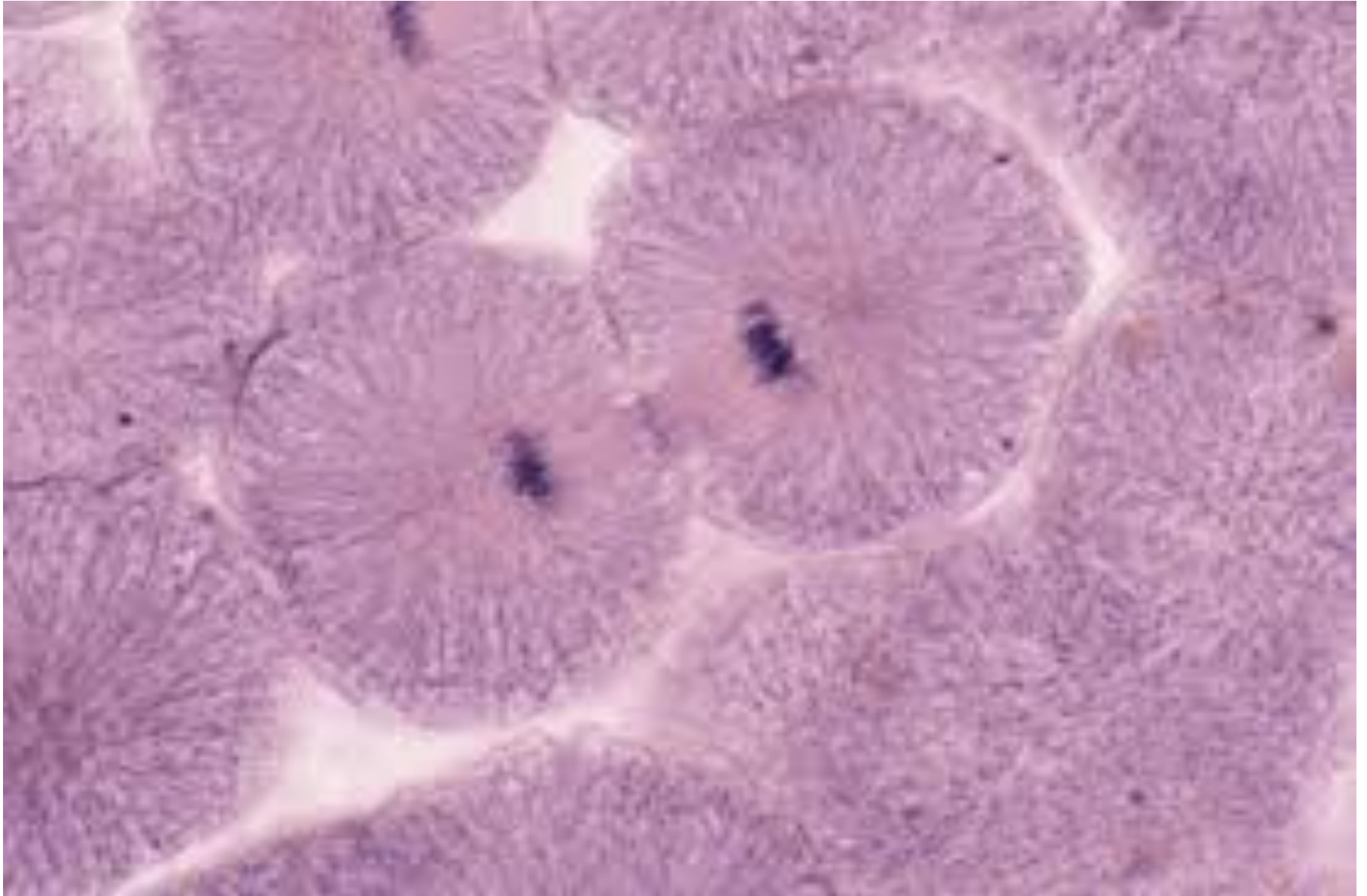


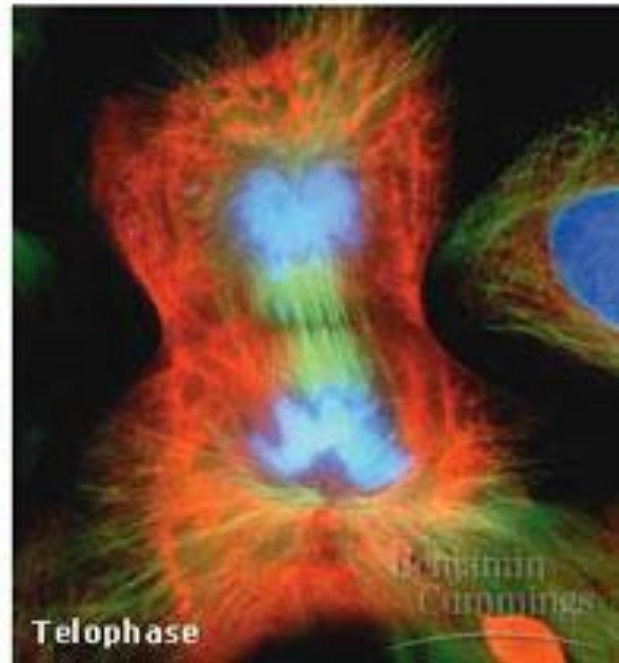
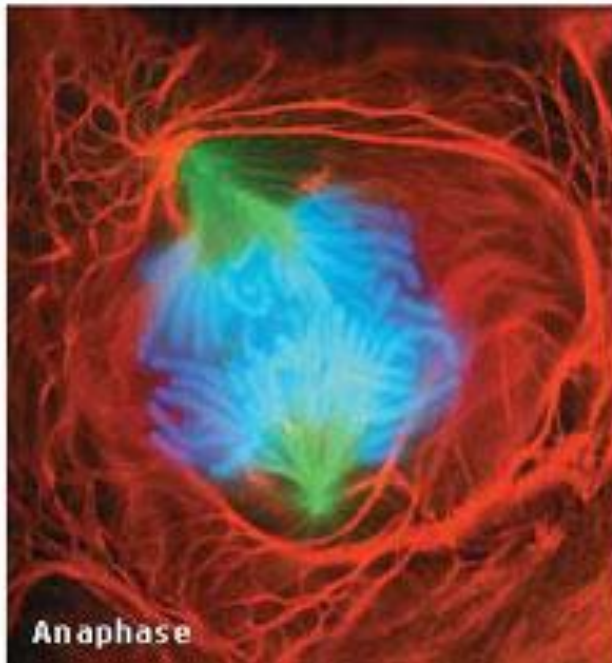
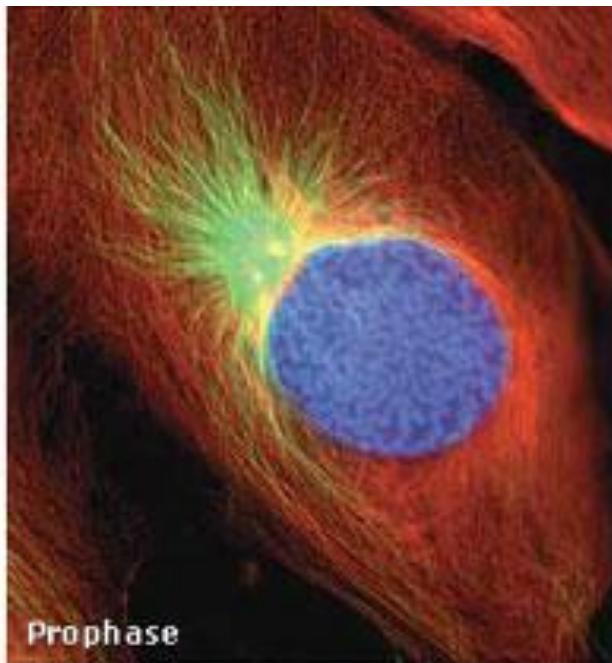
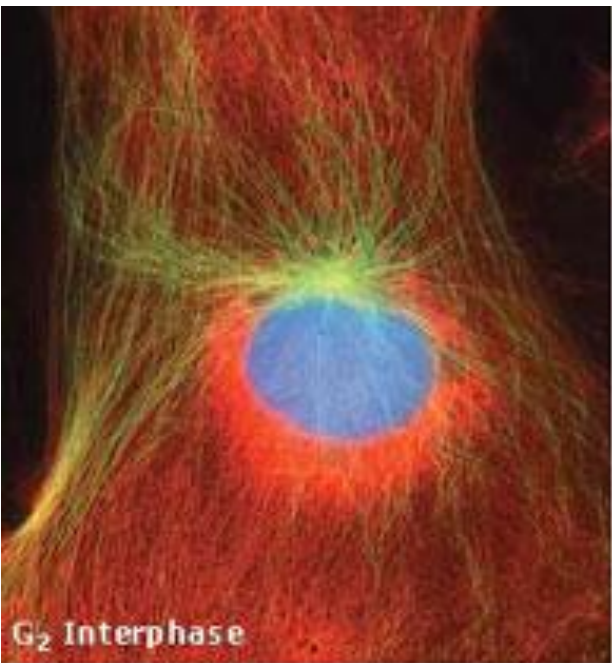


# Telofase



# Citocinesis





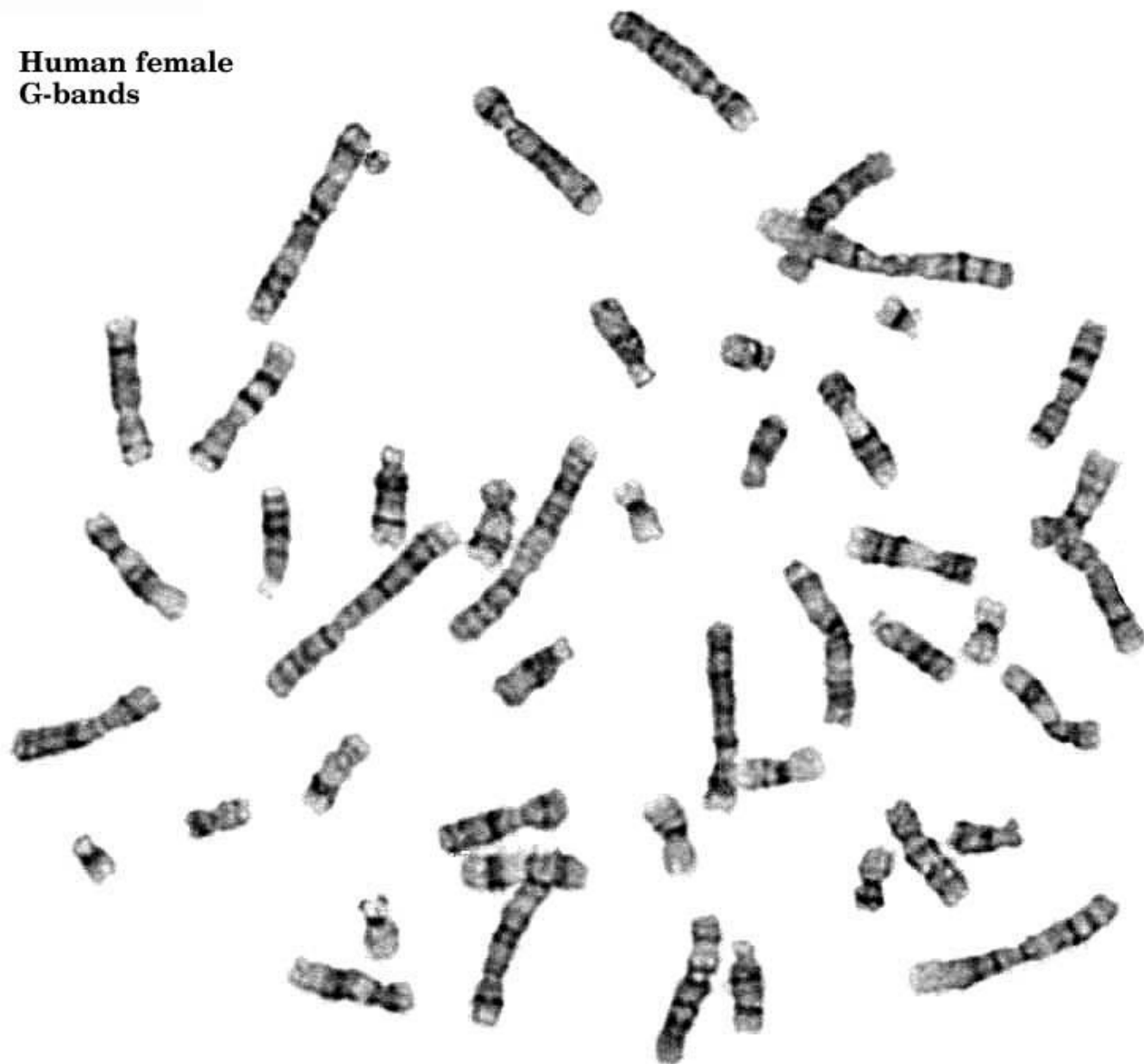


Cariotipo: juego completo de cromosomas de una célula ordenados en función de su tamaño, forma y número.

Bandeo: Técnica de tinción de bandas o de segmentos de cromosomas que permiten la identificación precisa de cromosomas individuales o partes de cromosomas.

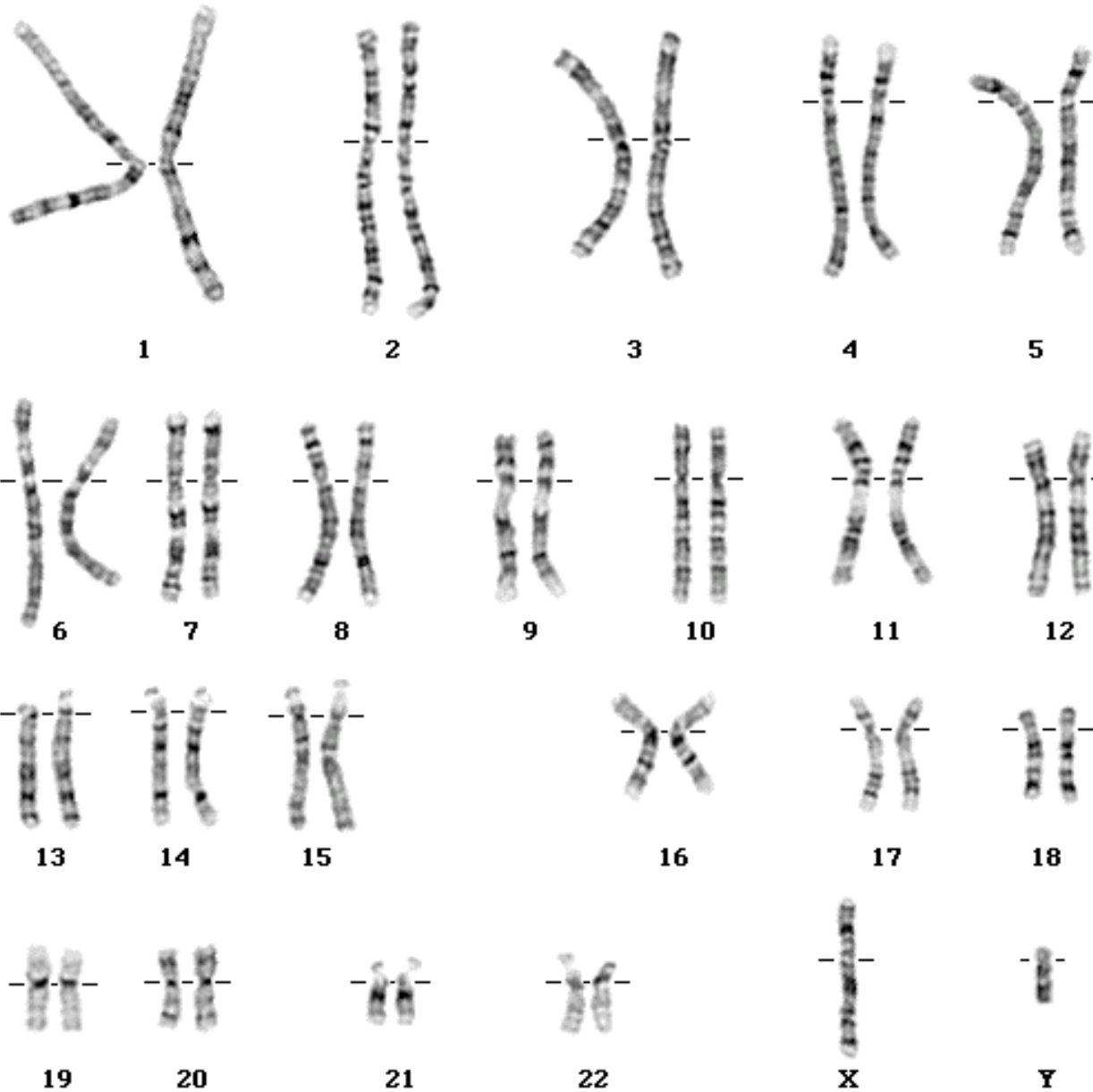
Las técnicas de bandeo permiten establecer el número de cromosomas en un individuo o una especie, detectar cambios cromosómicos estructurales y cambios numéricos.

Human female  
G-bands





# Cariotipo humano





1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



17



18



19



20



21



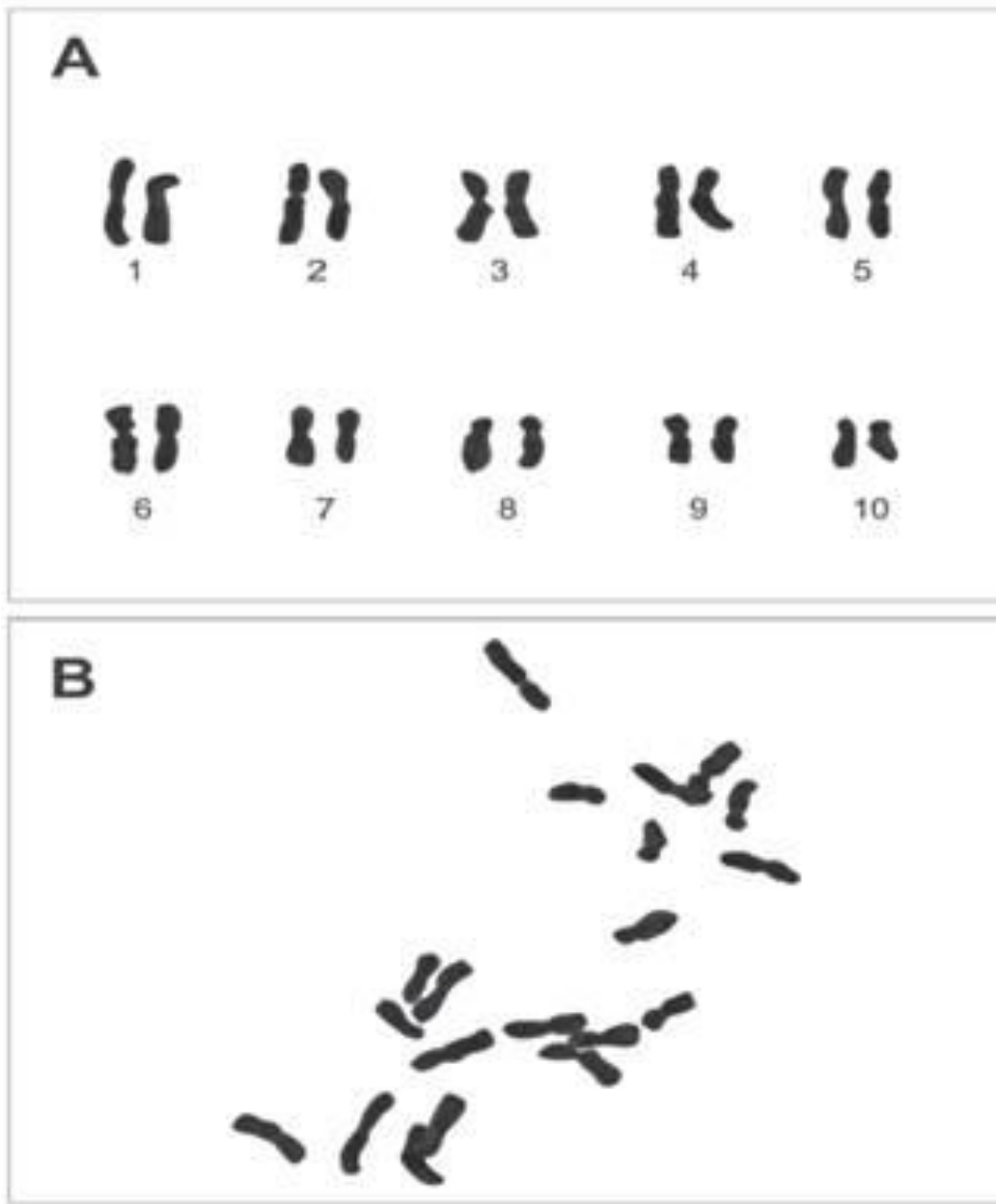
22



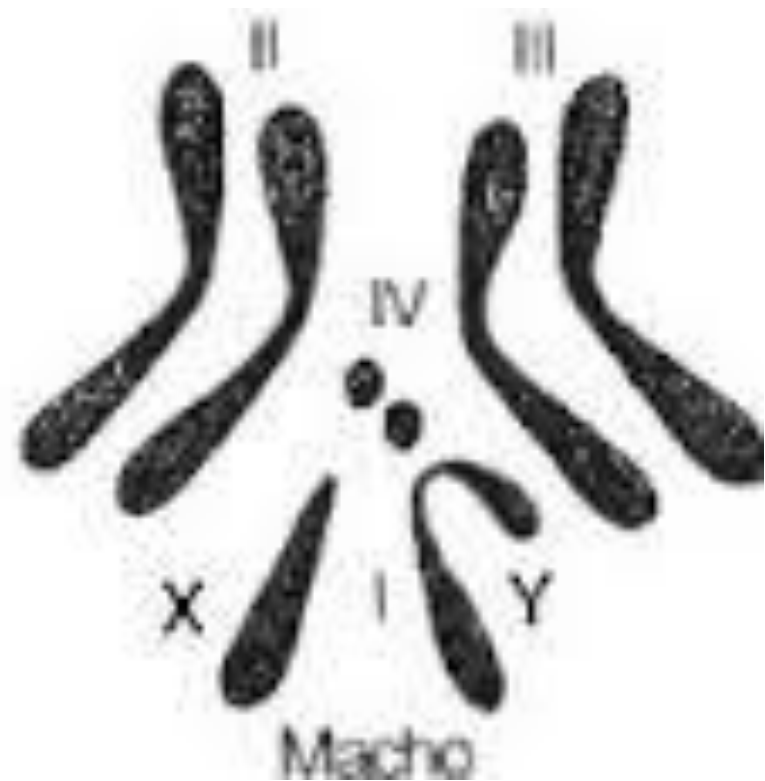
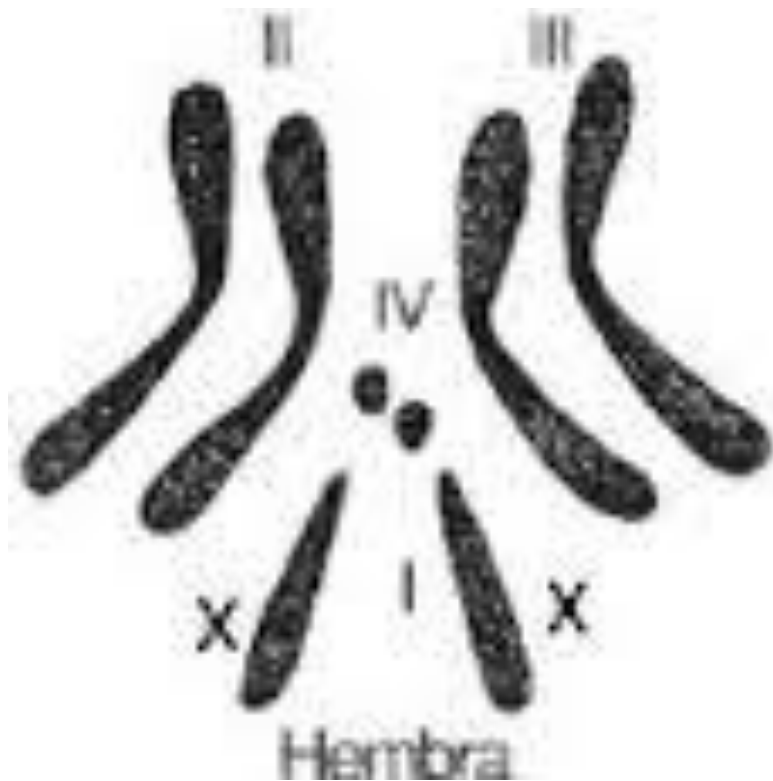
X

Y





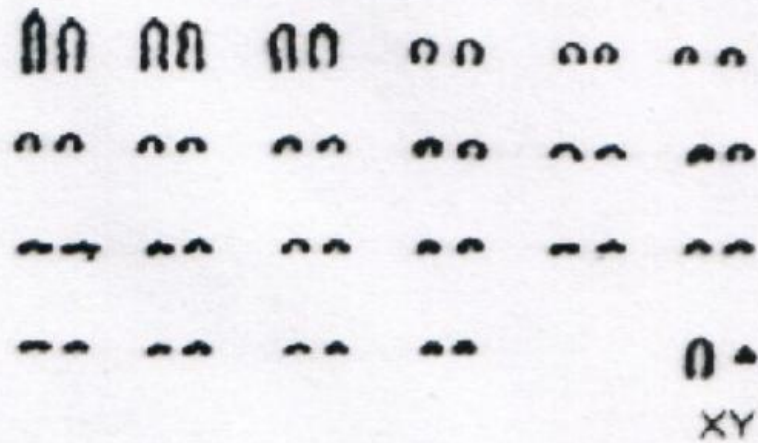
A) Karyotype and B) Metaphase plate of *Z. mays* ssp. *mays* native corn Proto-Confite morocho.



Cariotipo de *Drosophila melanogaster*



Chinese muntjac  
*Muntiacus reevesi*



Indian muntjac  
*Muntiacus muntjak*



El ciervo muntjac chino e indio y sus cariotipos. El muntjac indio, con 2 pares de autosomas y tres cromosomas sexuales, tiene el numero cromosómico más bajo conocido en mamíferos.

*Muntiacus muntjak* y *M. rooseveltorum* de India,  $2n=6$ , y *M. reevesi* de China,  $2n=46$ . Producen híbridos viables