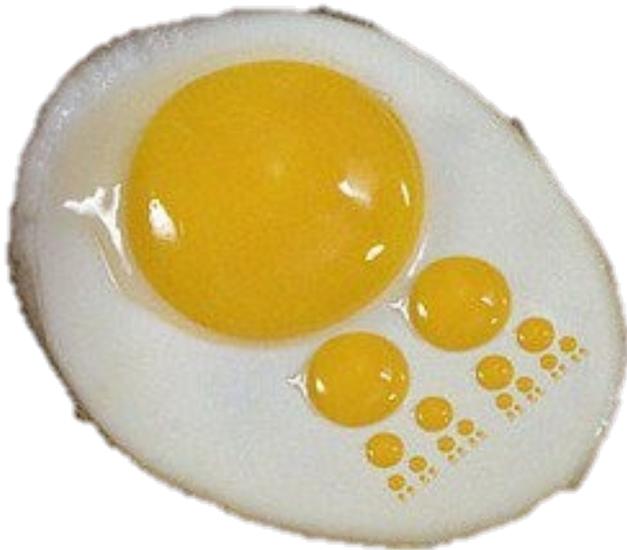


MITOSE

Aula prática 10



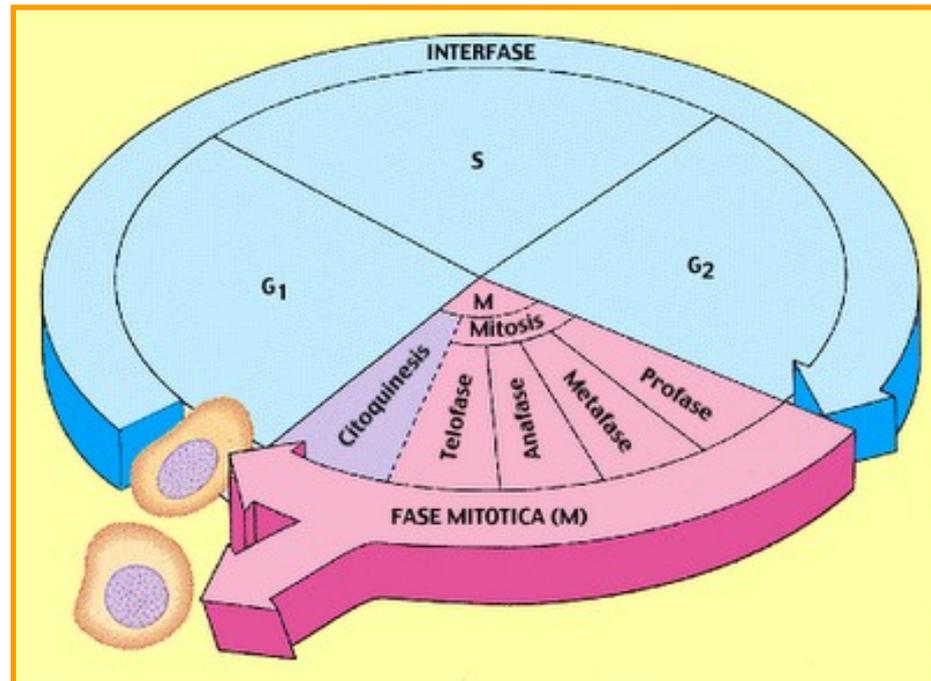
LGN0114 - Biologia Celular

Leandro F. de Souza
Departamento de Genética
leandro_fonseca@usp.br

CICLO CELULAR: INTERFASE E MITOSE

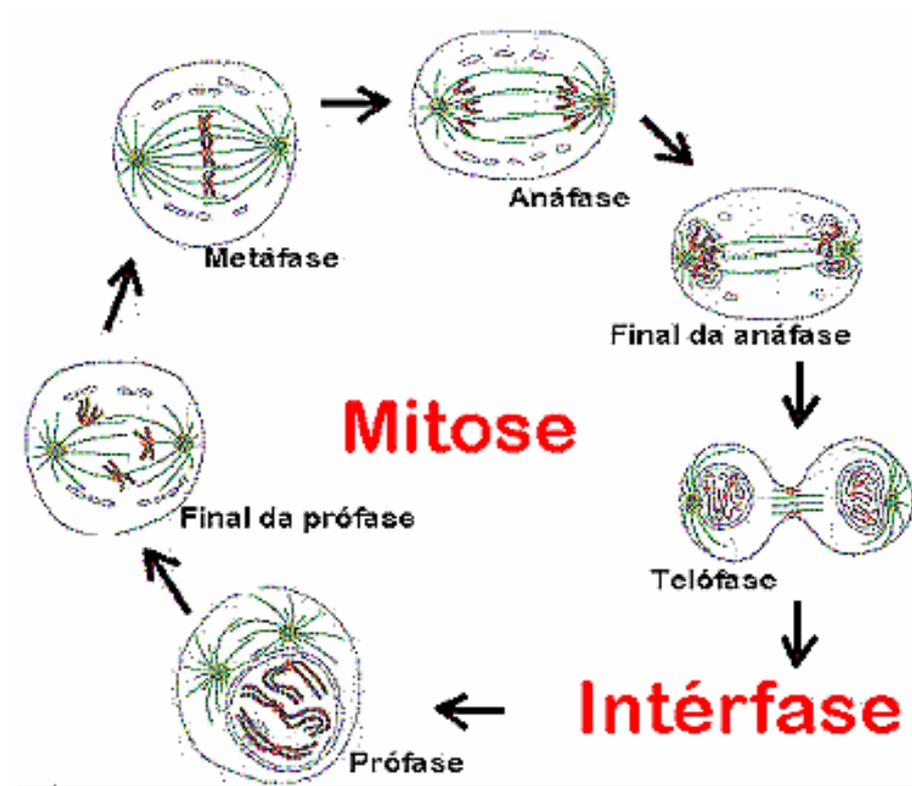
Eventos de duplicação do conteúdo celular e sua posterior divisão → forma dos organismos multicelulares crescerem

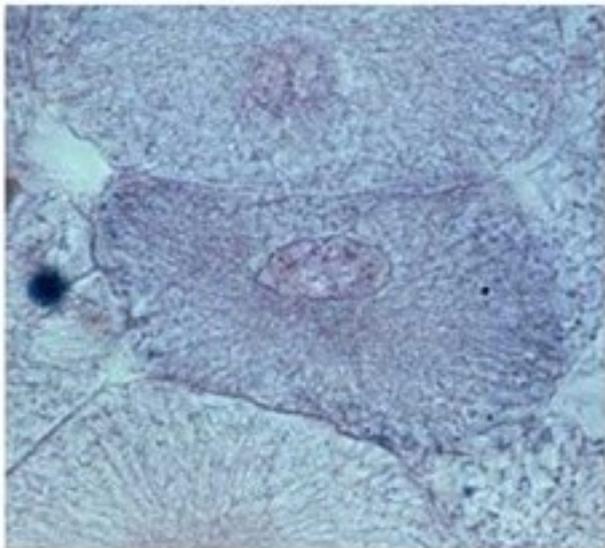
- ✓ Células filhas herdam uma réplica exata da informação genética da célula mãe;
- ✓ Células filhas semelhantes à célula mãe e entre si;
- ✓ Cada célula filha herda metade do citoplasma da célula mãe;



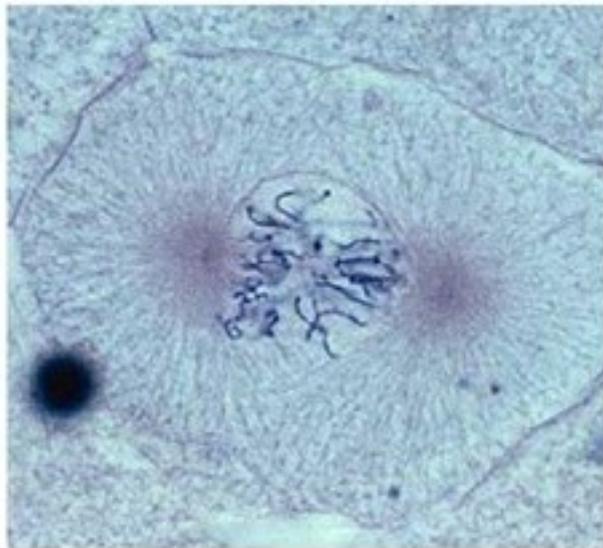
DIVISÃO CELULAR: MITOSE E CITOCINESE

- ✓ **Mitose:** ou divisão nuclear, processo através do qual o material genético é precisamente duplicado e são gerados novos cromossomos idênticos ao original, os quais são posteriormente alocados em dois núcleos filhos;
- ✓ **Citocinese:** processo que divide a célula inteira em duas novas células, divisão do citoplasma.

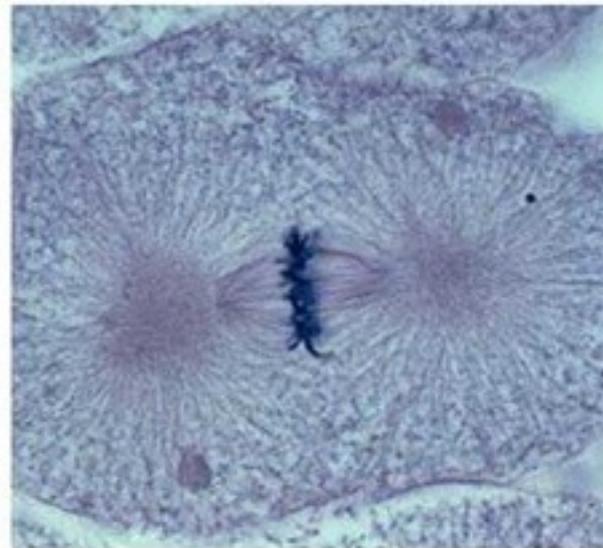




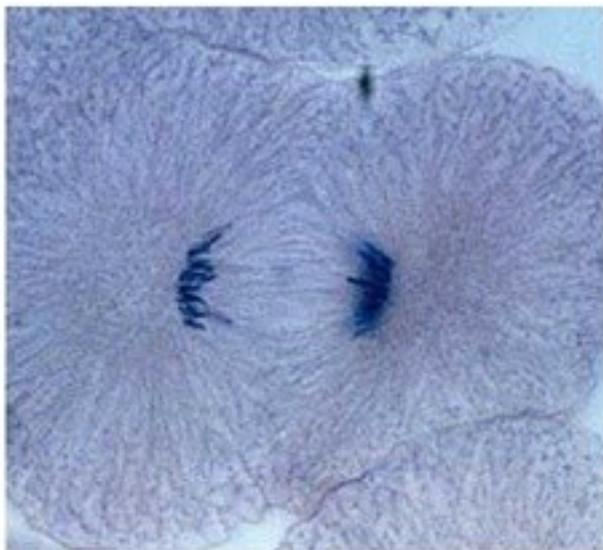
Interfase



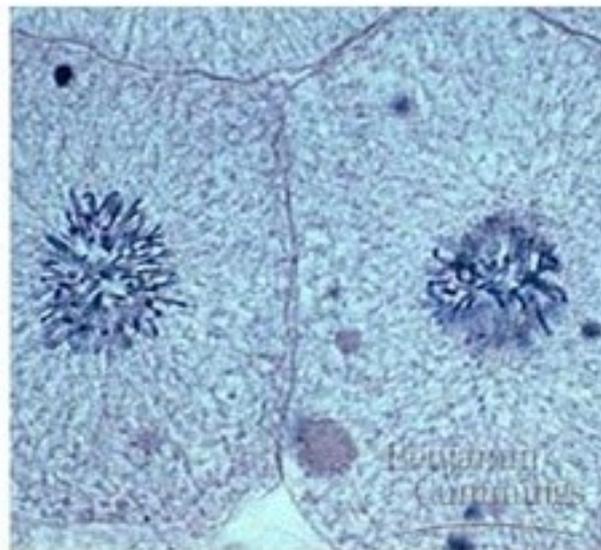
Prófase



Metáfase



Anáfase



Telófase (final)/ Citocinese

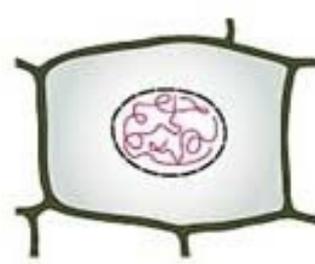
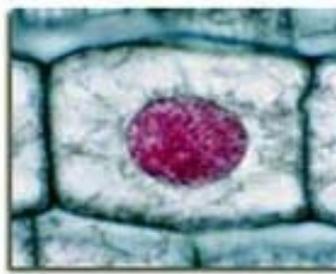
CICLO CELULAR E DIVISÃO CELULAR

Microscopia de luz da ponta da raiz de cebola

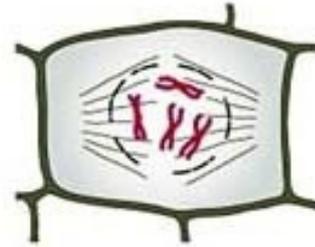
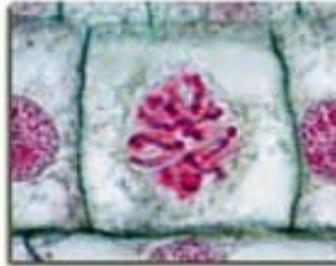
CÉLULA VEGETAL



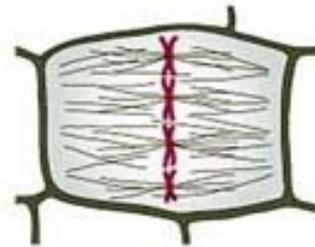
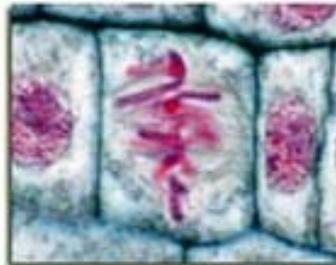
CÉLULA VEGETAL



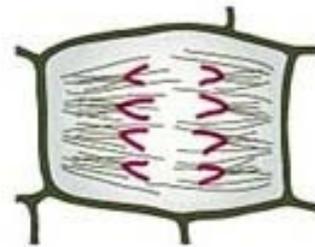
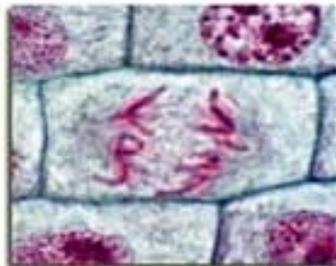
INTERFASE



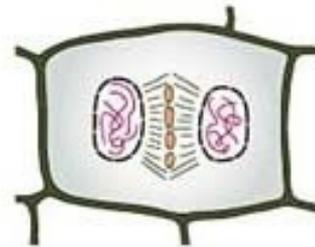
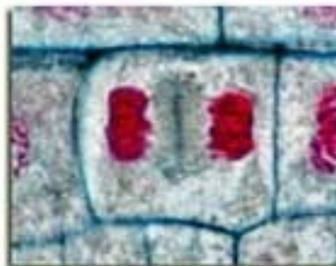
PRÓFASE



METÁFASE

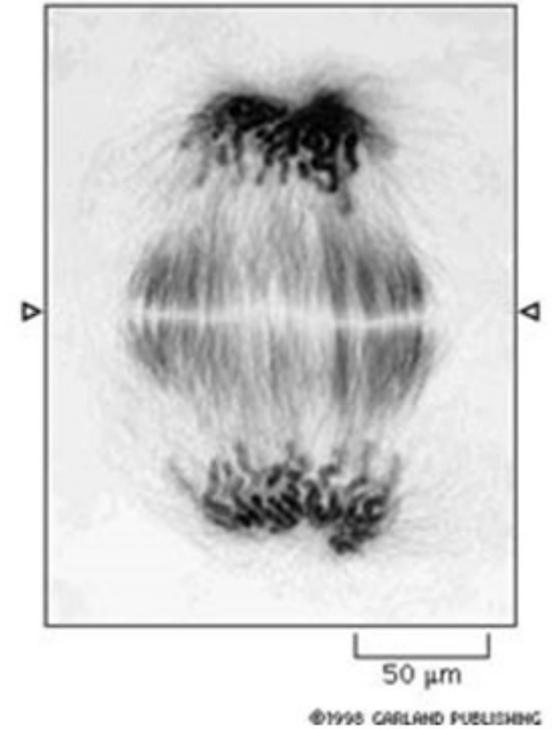
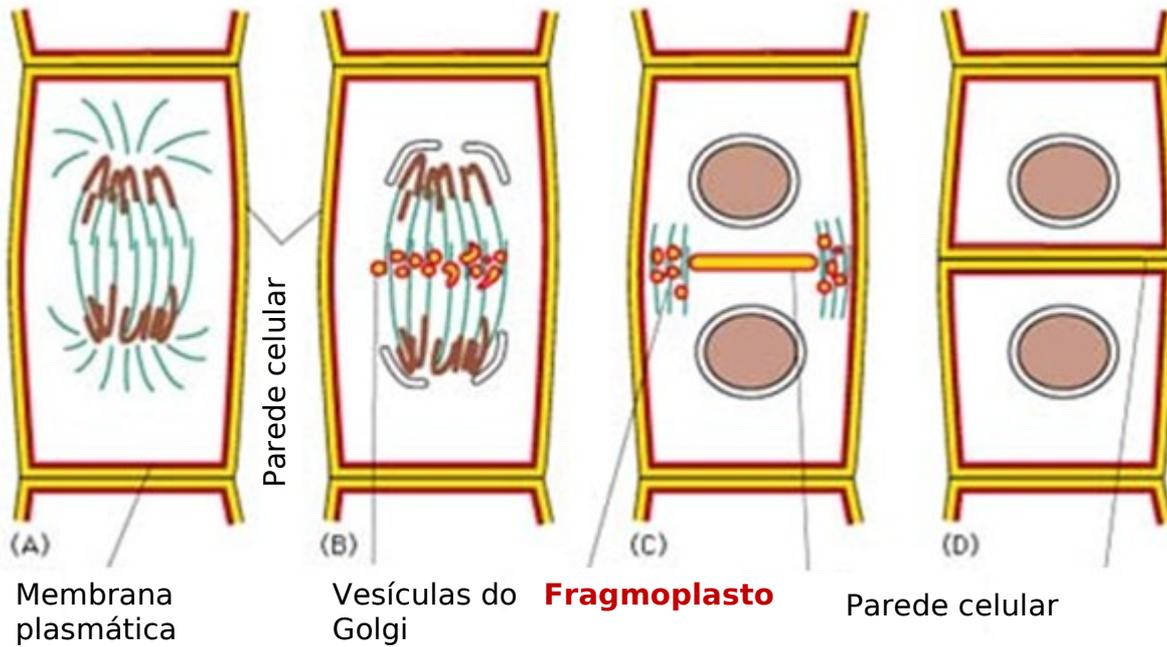


ANÁFASE



TELÓFASE

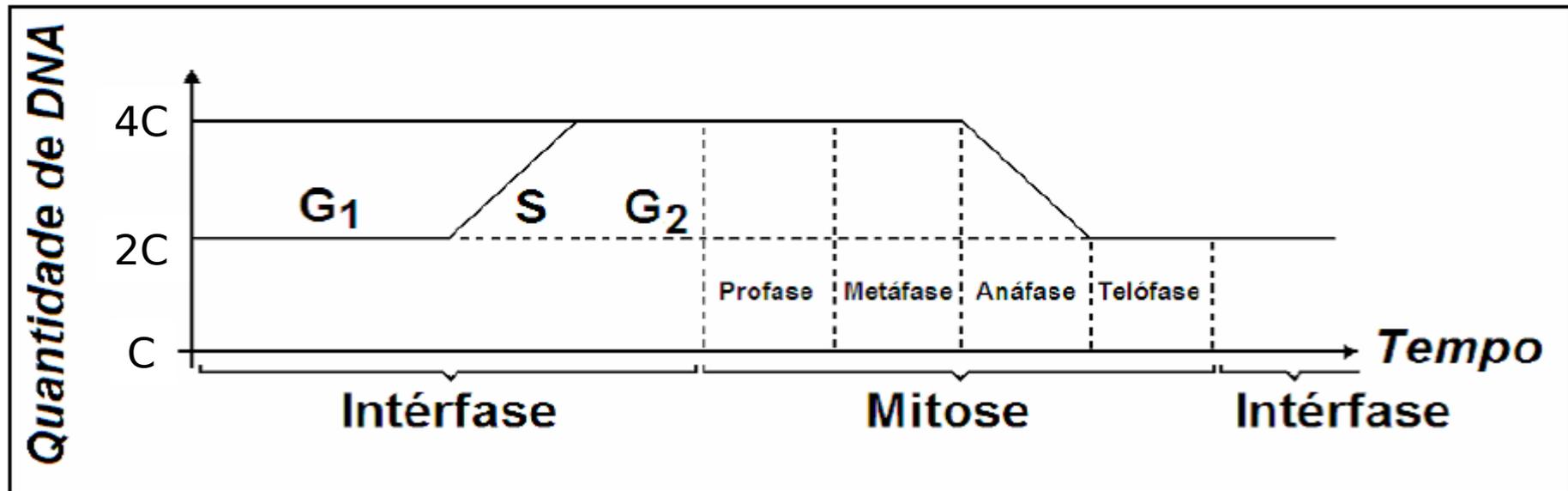
CÉLULA VEGETAL



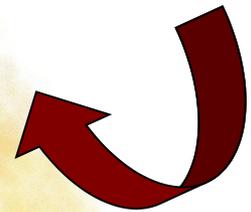
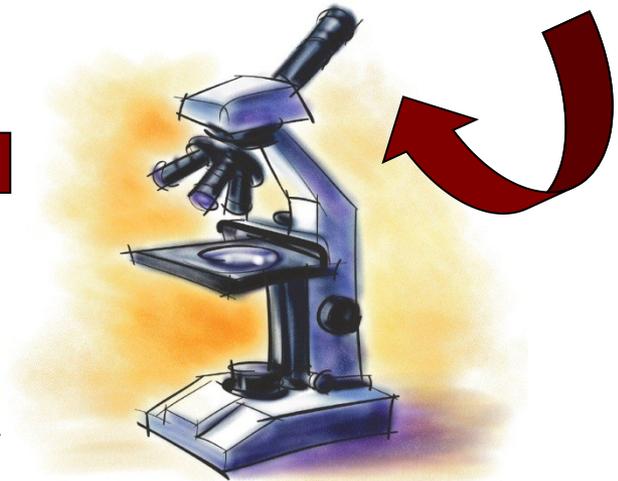
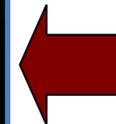
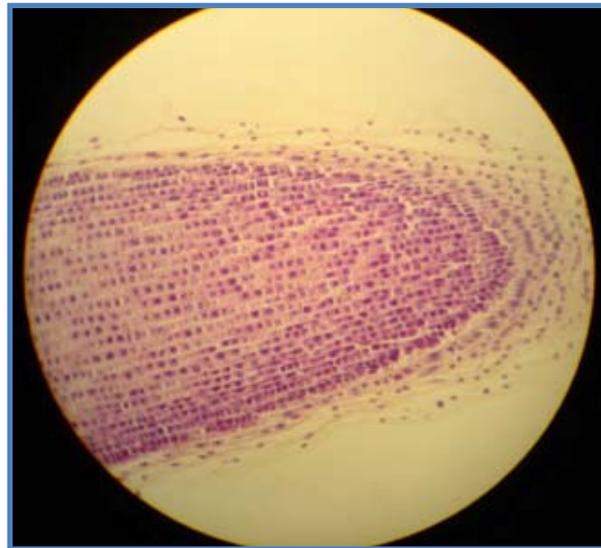
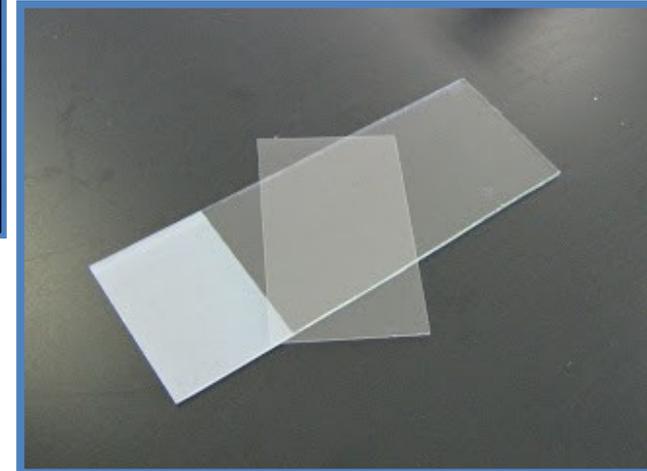
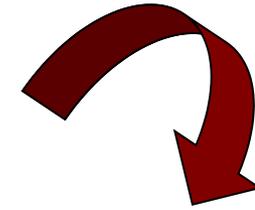
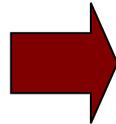
CITOCINESE

VARIAÇÃO DA QUANTIDADE DE DNA DURANTE A MITOSE

Organismo	Homem	Cão	Drosófila	Cebola	Gato
Número diploide de cromossomos	46	78	08	16	38

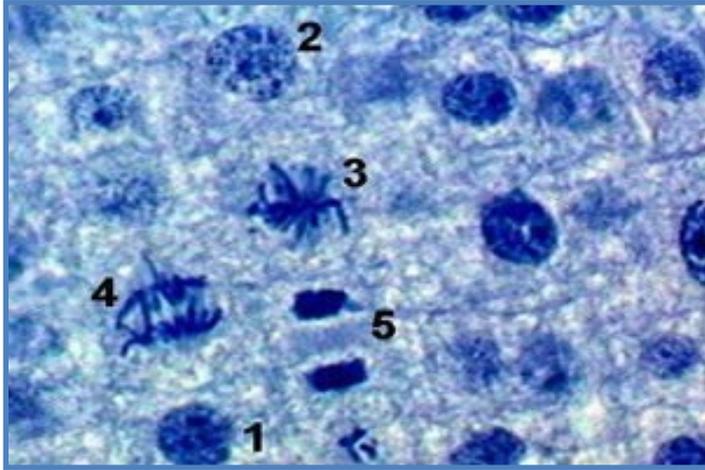


EXERCÍCIO:

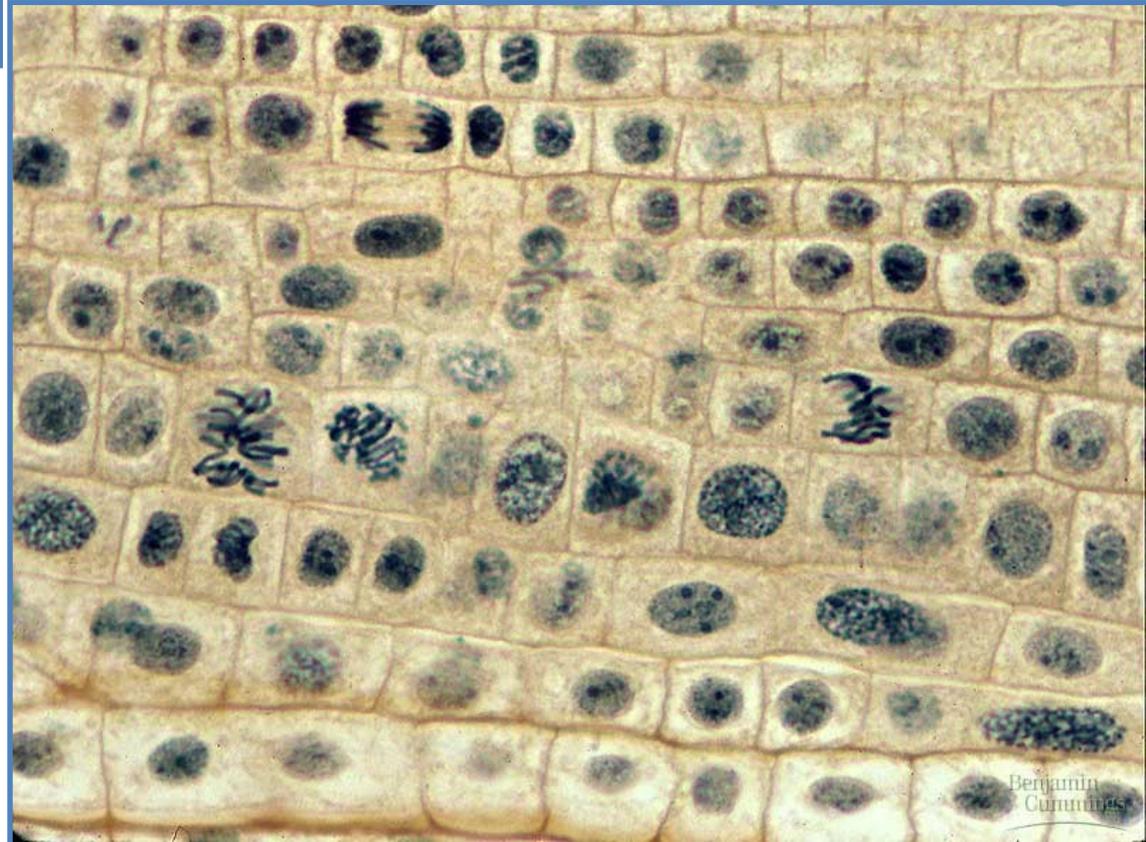


Usar aumentos de 10 e 40X

MITOSE NAS CÉLULAS DA RAIZ DE CEBOLA



1. Interfase
2. Prófase
3. Metáfase
4. Anáfase
5. Telófase



ESTUDO DIRIGIDO

1. Ciclo celular;
2. Fases da Interfase;
3. Fases da Mitose e suas características.

Capítulo 18 –O Ciclo da divisão celular (páginas 609 – 638)

Alberts, B.; Bray, D.; Hopkin, K.; Johnson, A.; Lewis, J.; Raff, M.; Roberts, K.; Walter, P. 2011. *Fundamentos da Biologia Celular*. 3ª Edição brasileira. Artmed, Porto Alegre

Bom trabalho!!!