

MITOSE

Aula prática 10



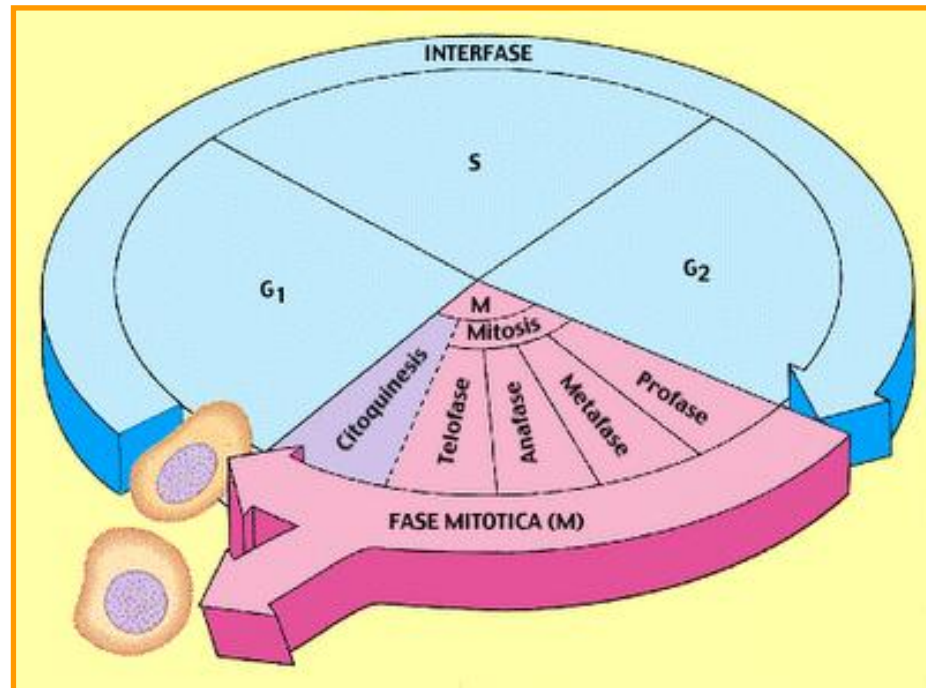
LGN0114 – Biologia Celular

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CICLO CELULAR: INTERFASE E MITOSE

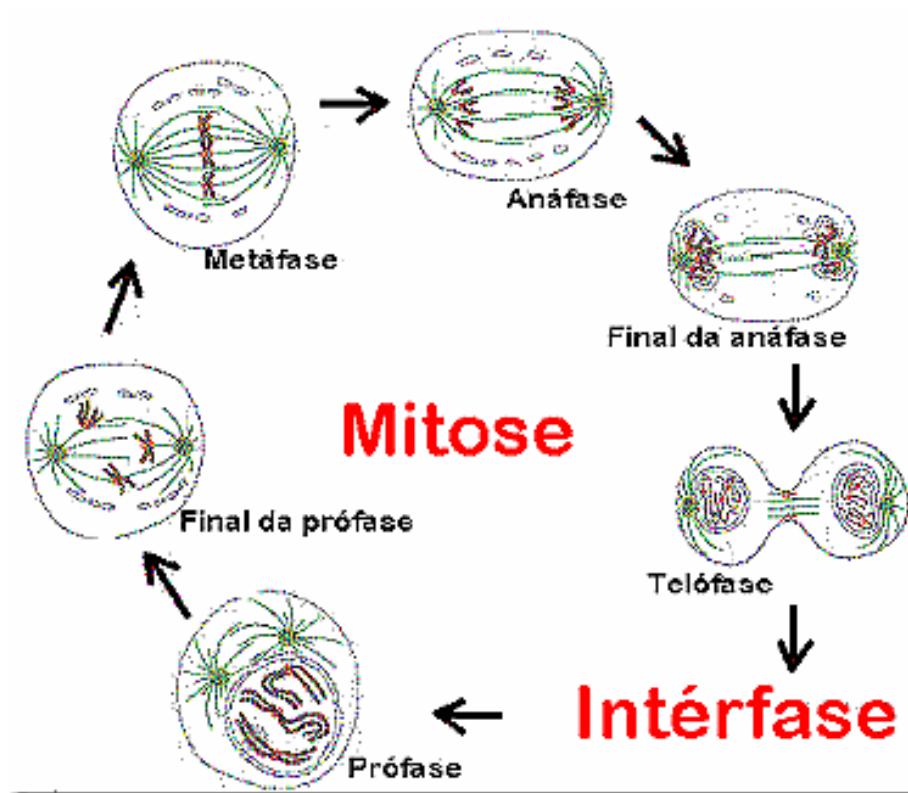
Eventos de duplicação do conteúdo celular e sua posterior divisão → forma dos organismos multicelulares crescerem

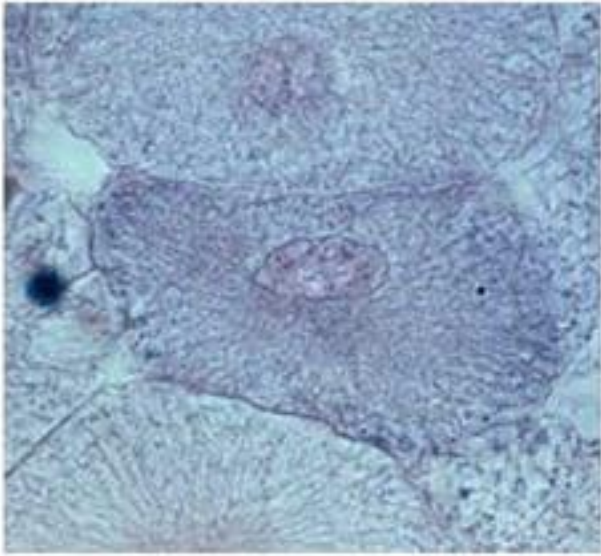
- ✓ Células filhas herdam uma réplica exata da informação genética da célula mãe;
- ✓ Células filhas semelhantes à célula mãe e entre si;
- ✓ Cada célula filha herda metade do citoplasma da célula mãe;



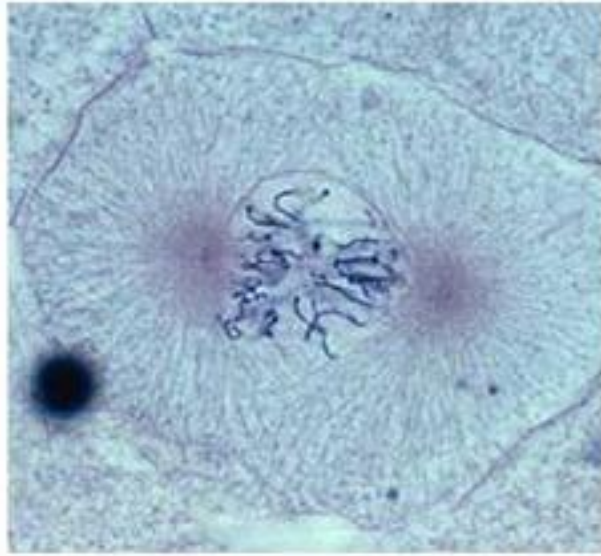
DIVISÃO CELULAR: MITOSE E CITOCINESE

- ✓ **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.

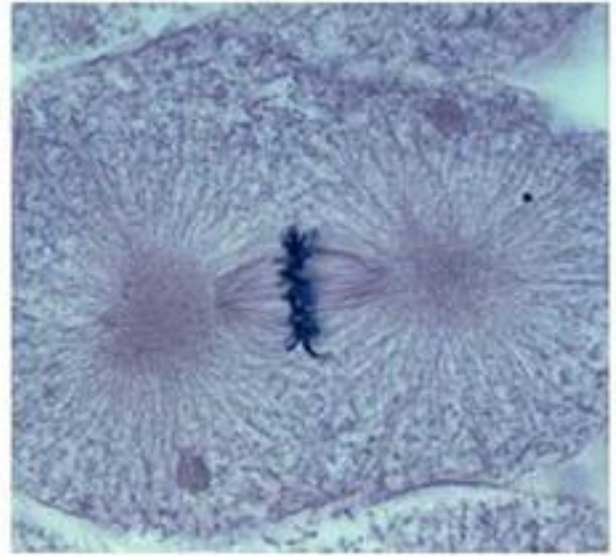




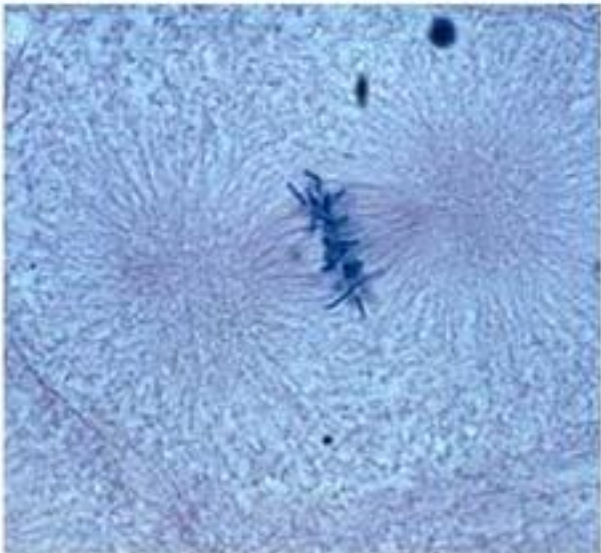
Interfase



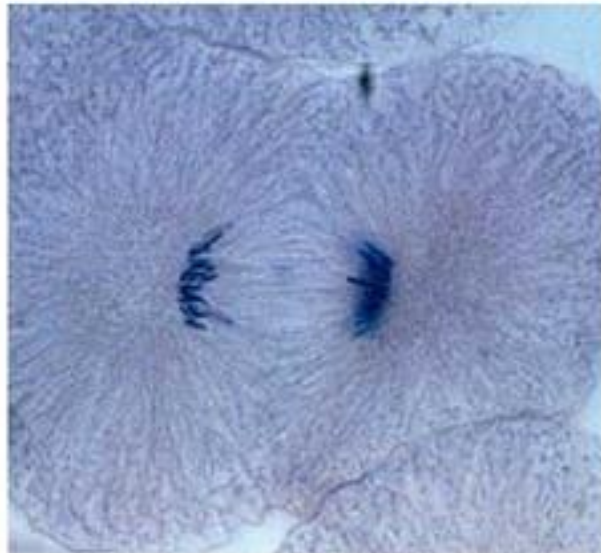
Prófase



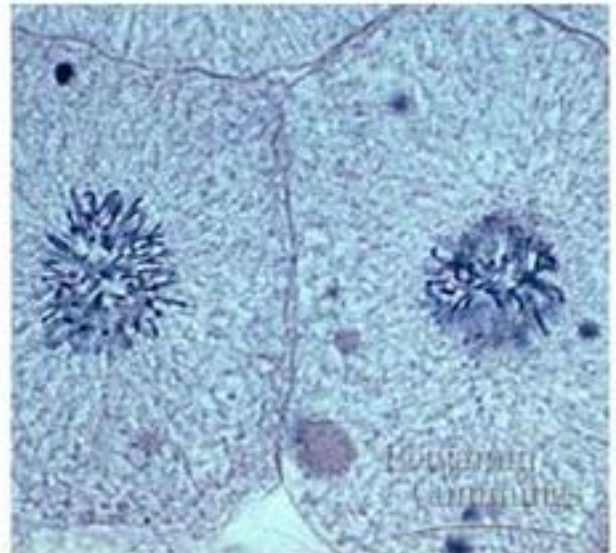
Metáfase



Anáfase



Telófase (início)



Telófase (final)

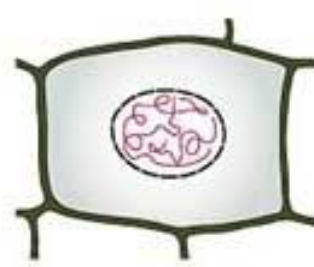
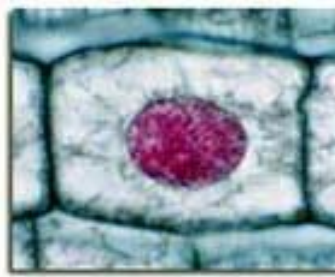
CICLO CELULAR E DIVISÃO CELULAR

Microscopia de luz da ponta da raiz de cebola

CÉLULA VEGETAL



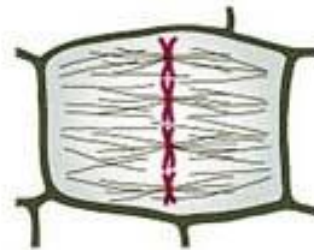
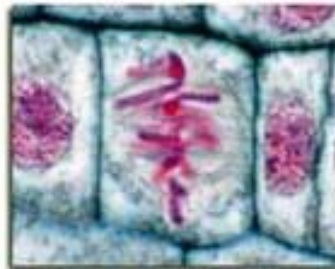
CÉLULA VEGETAL



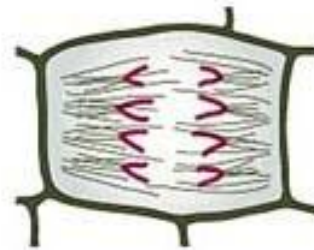
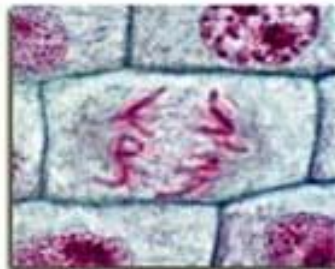
INTERFASE



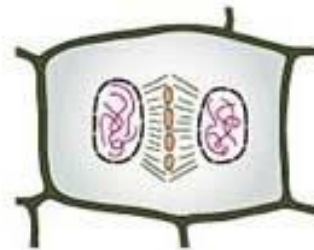
PRÓFASE



METÁFASE

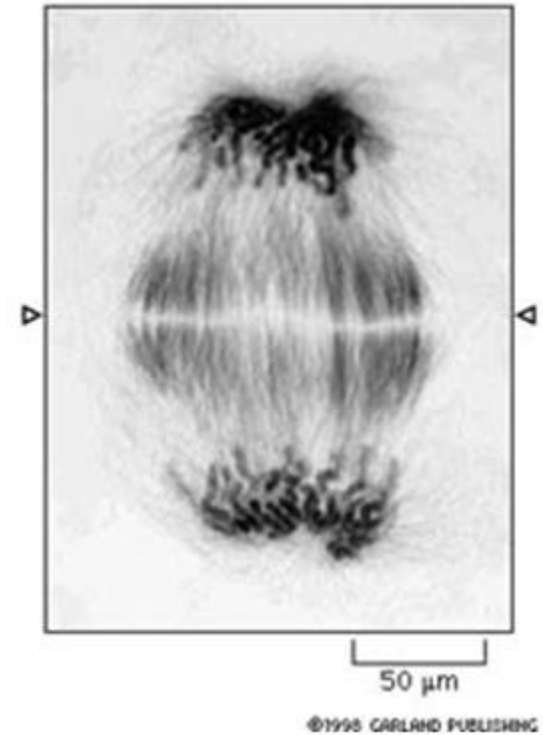
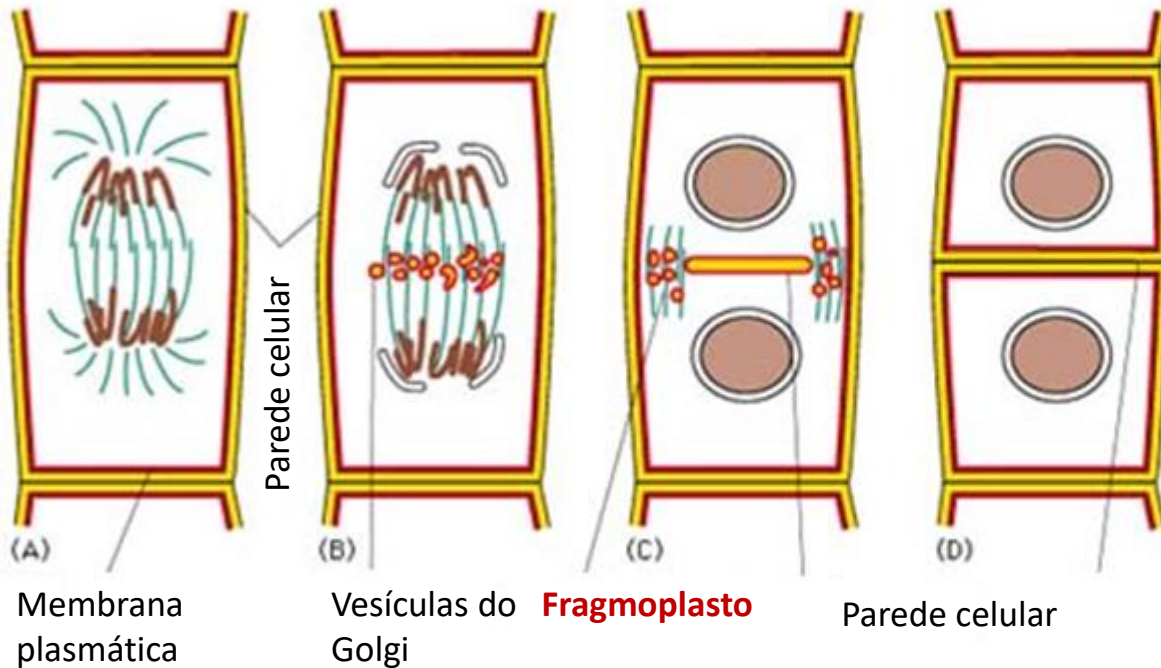


ANÁFASE



TELÓFASE

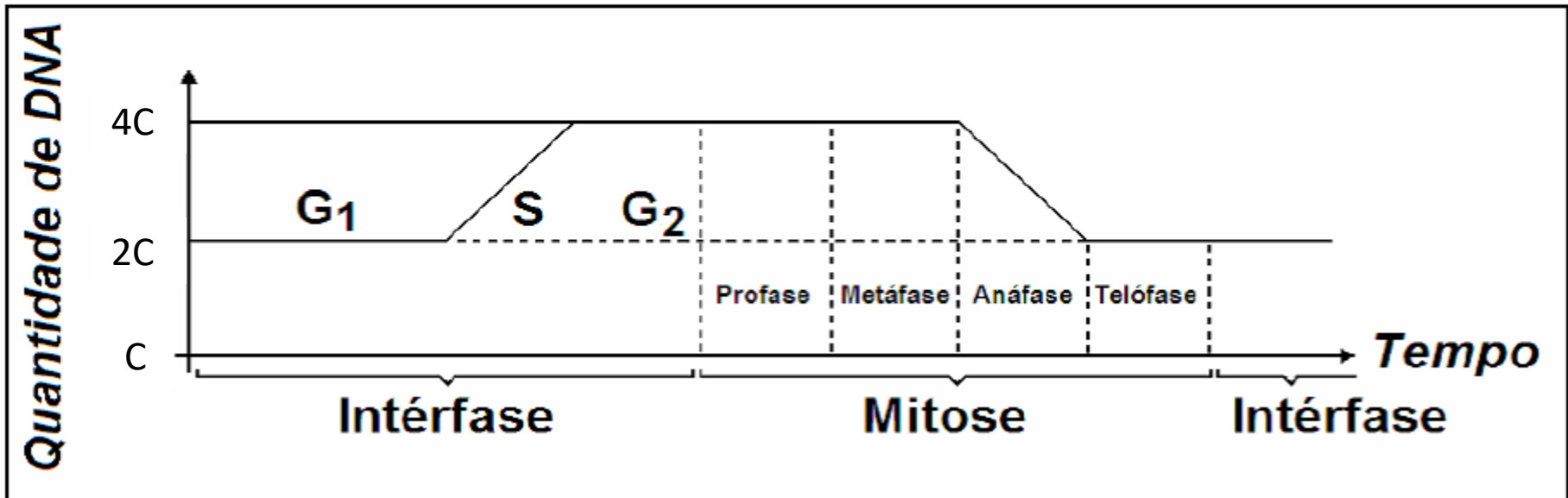
CÉLULA VEGETAL



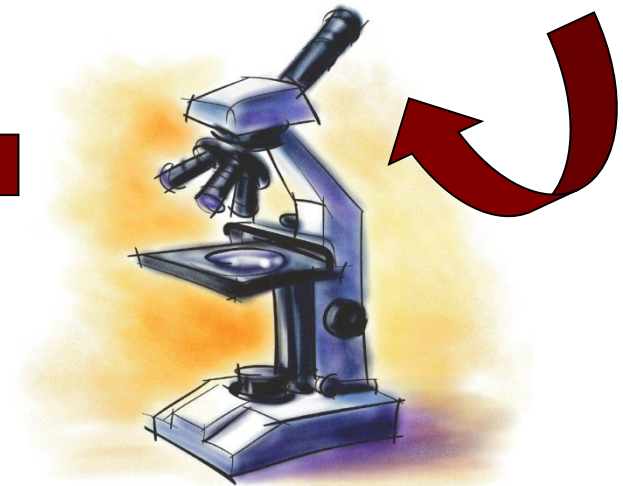
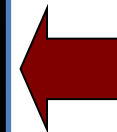
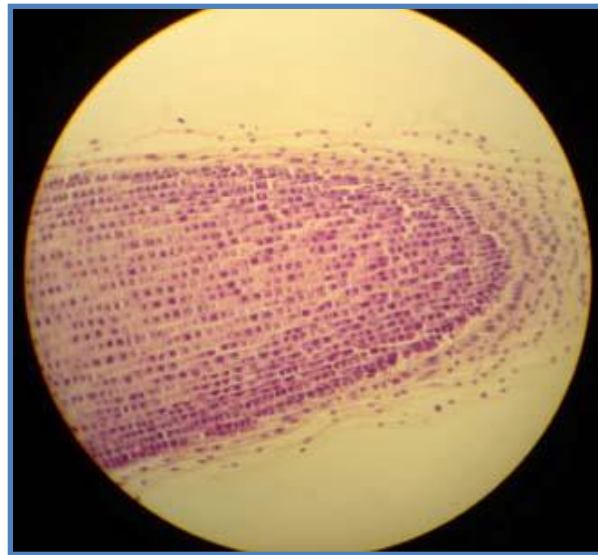
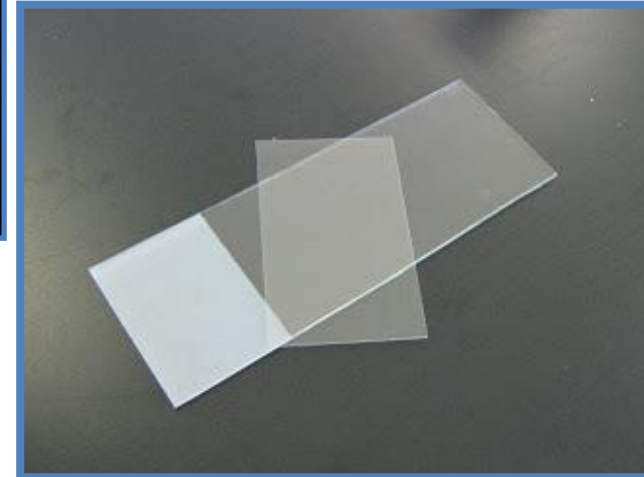
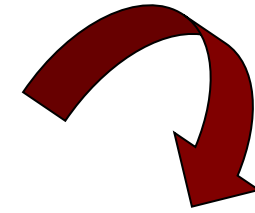
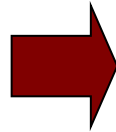
CITOCINESE

VARIAÇÃO DA QUANTIDADE DE DNA DURANTE A MITOSE

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

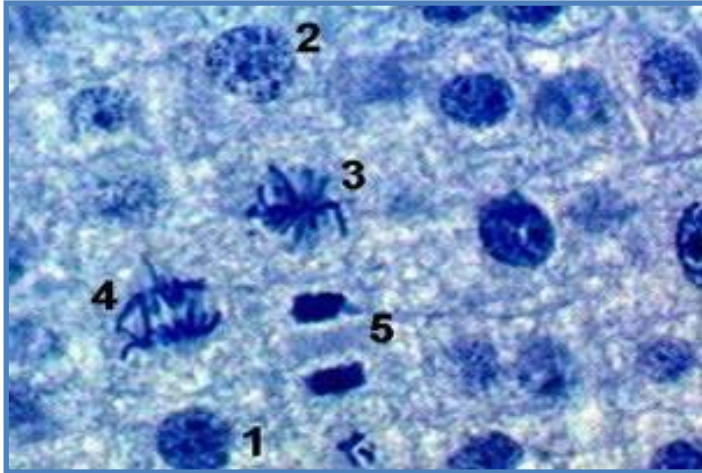


EXERCÍCIO:

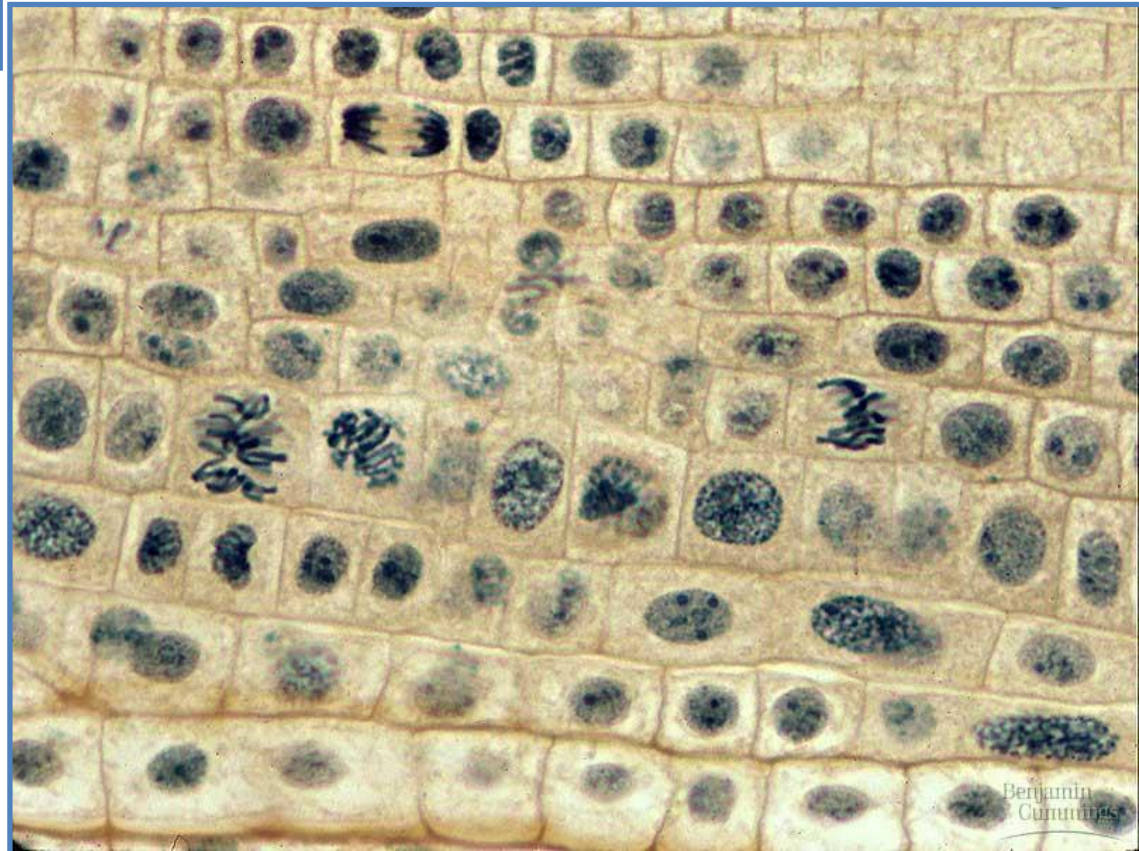


Usar aumentos de 10 e 40X

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!!!