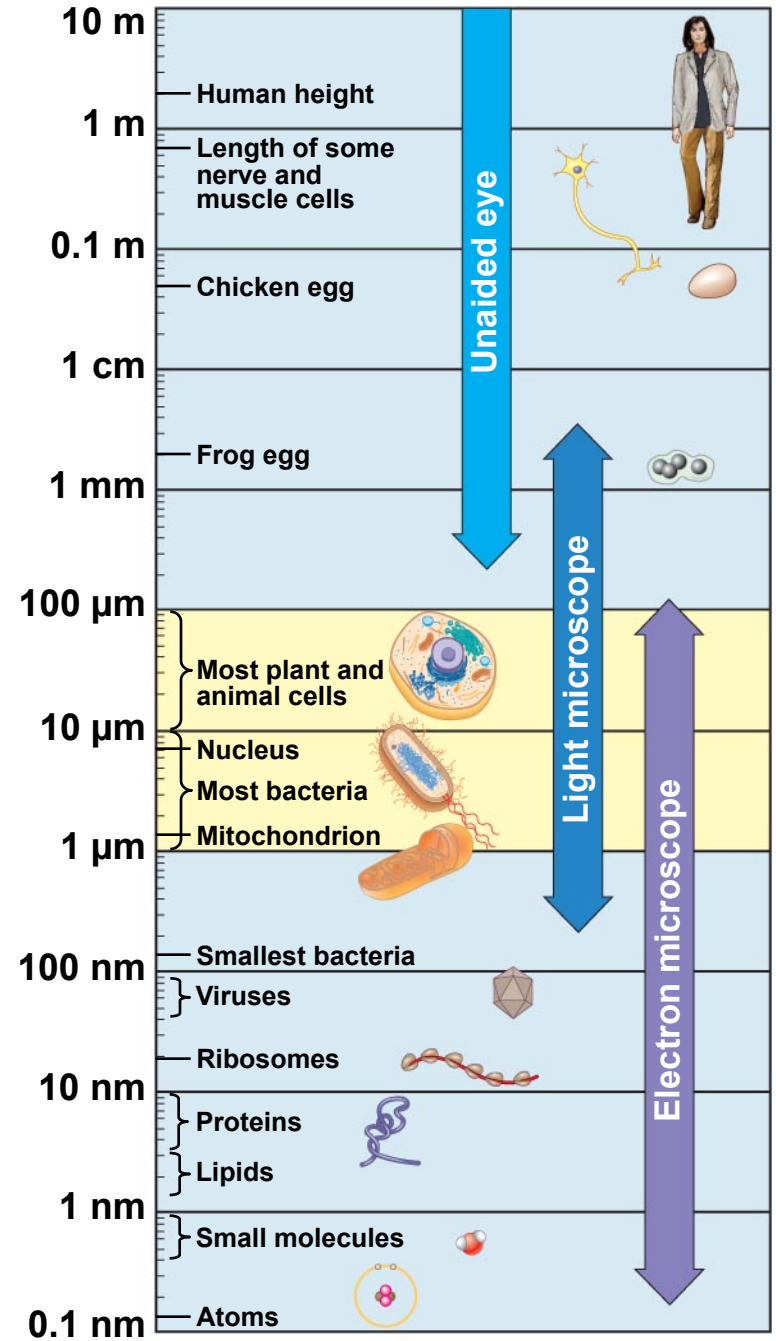

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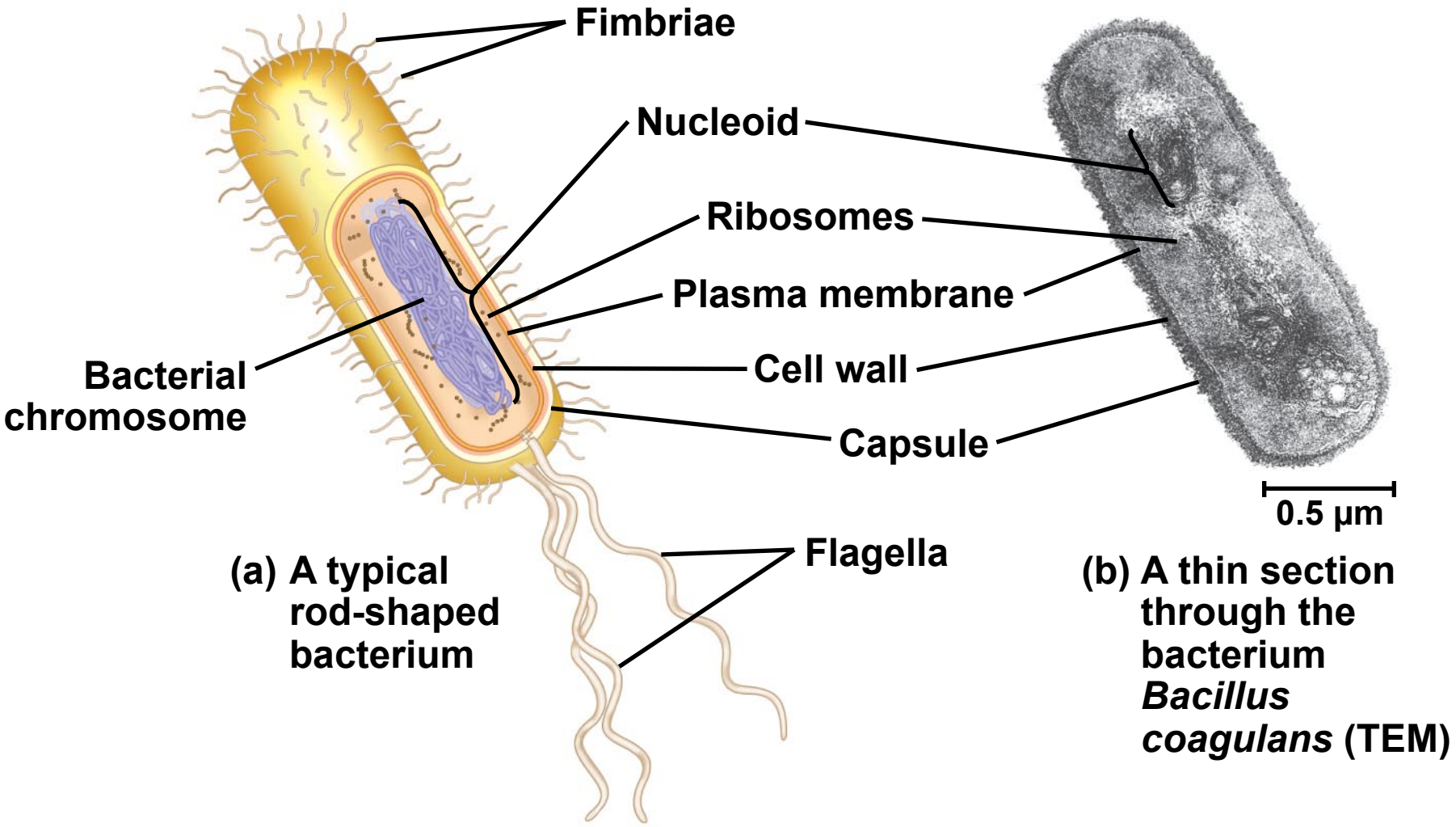

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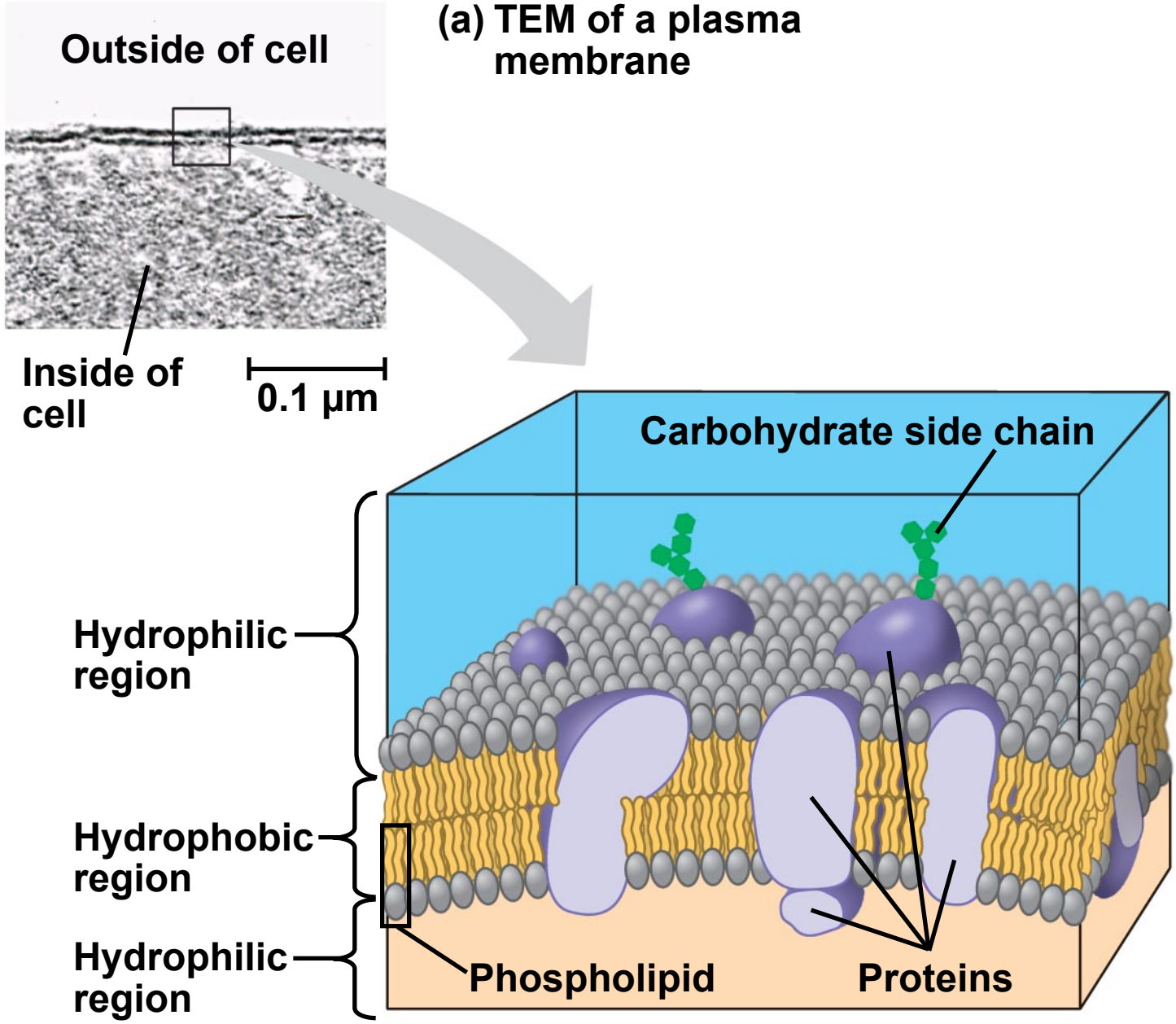

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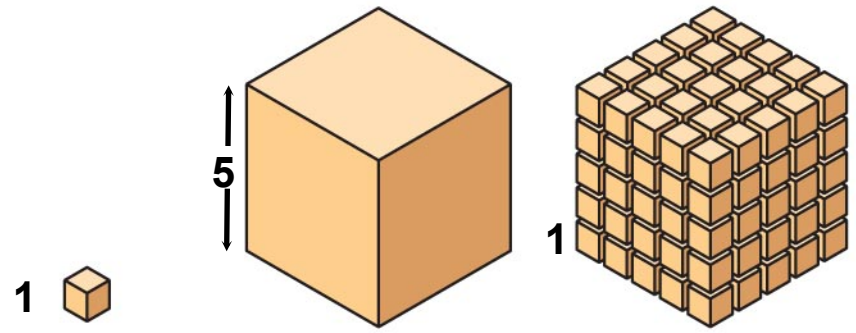
Surface area increases while total volume remains constant



Total surface area [Sum of the surface areas (height × width) of all boxes sides × number of boxes]	**6**	**150**	**750**
Total volume [height × width × length × number of boxes]	**1**	**125**	**125**
Surface-to-volume (S-to-V) ratio [surface area ÷ volume]	**6**	**1.2**	**6**

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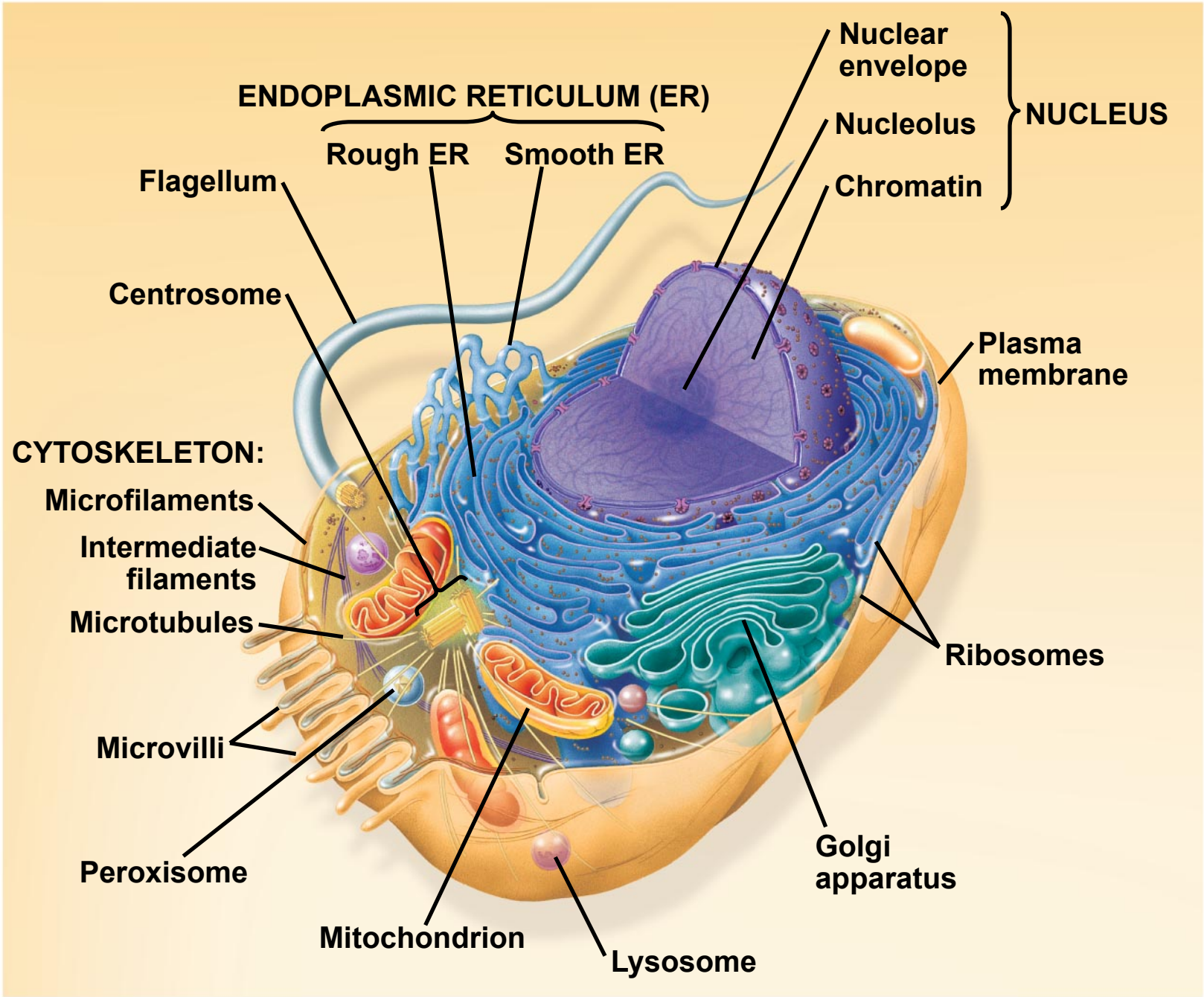

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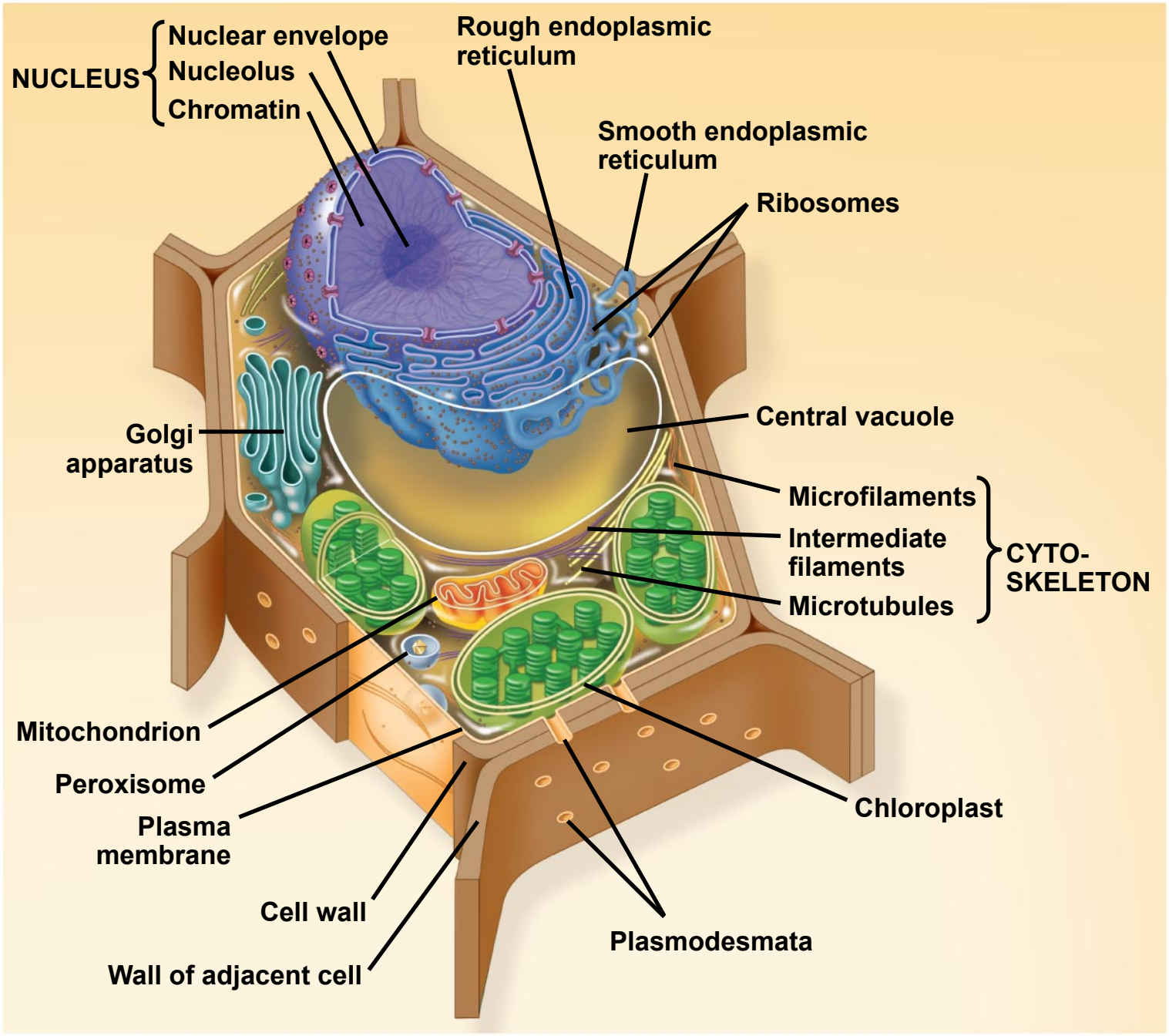

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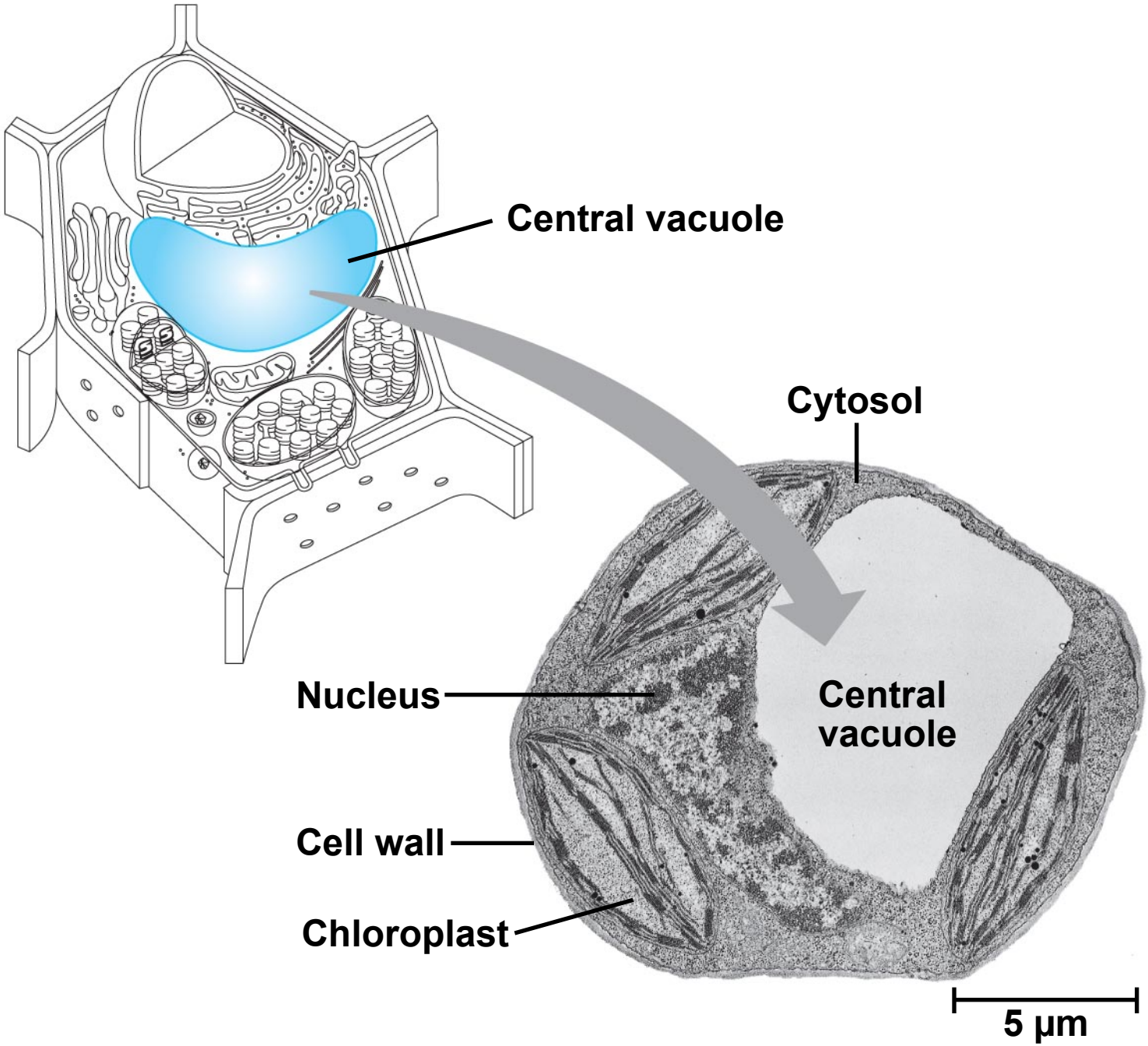

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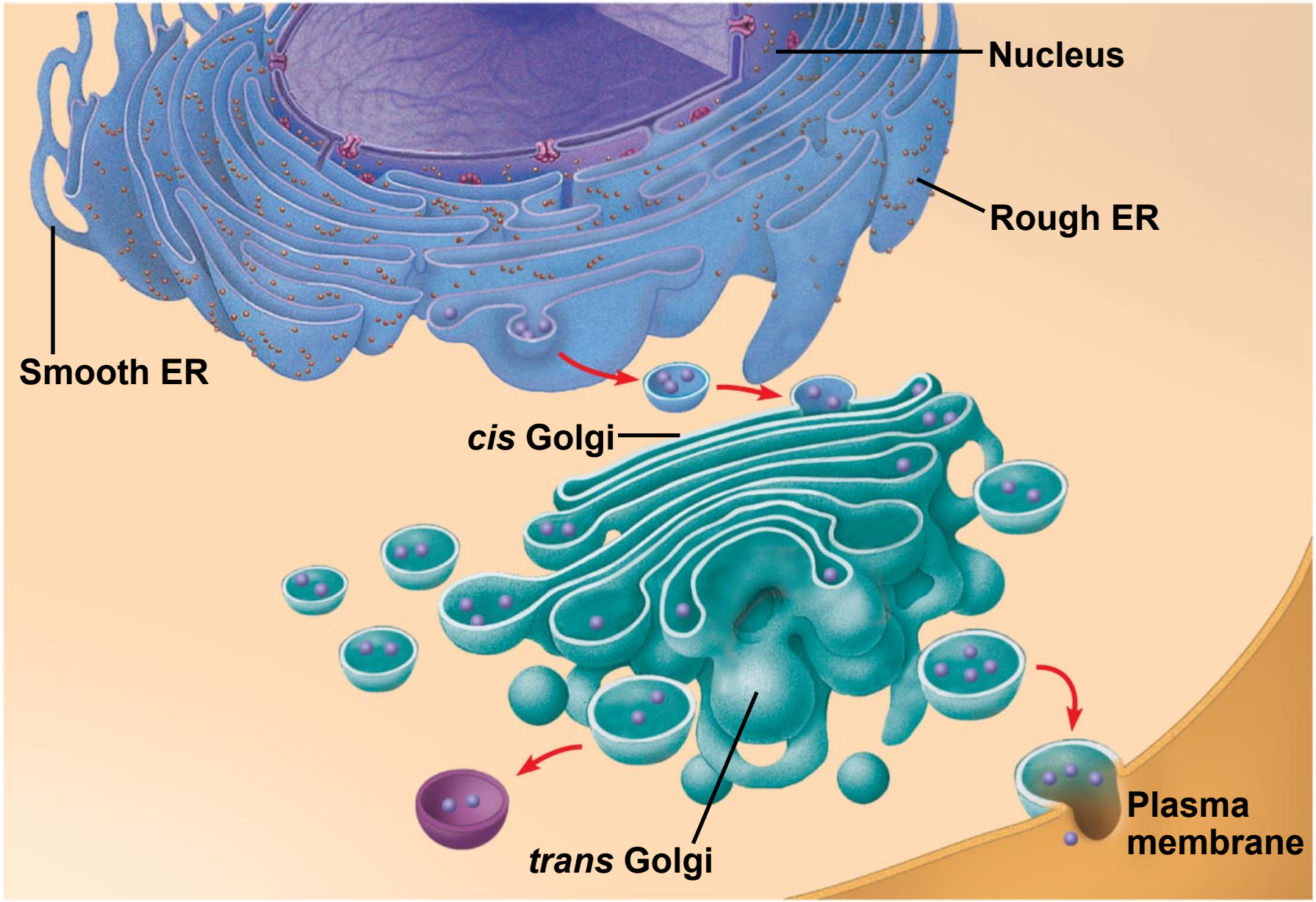
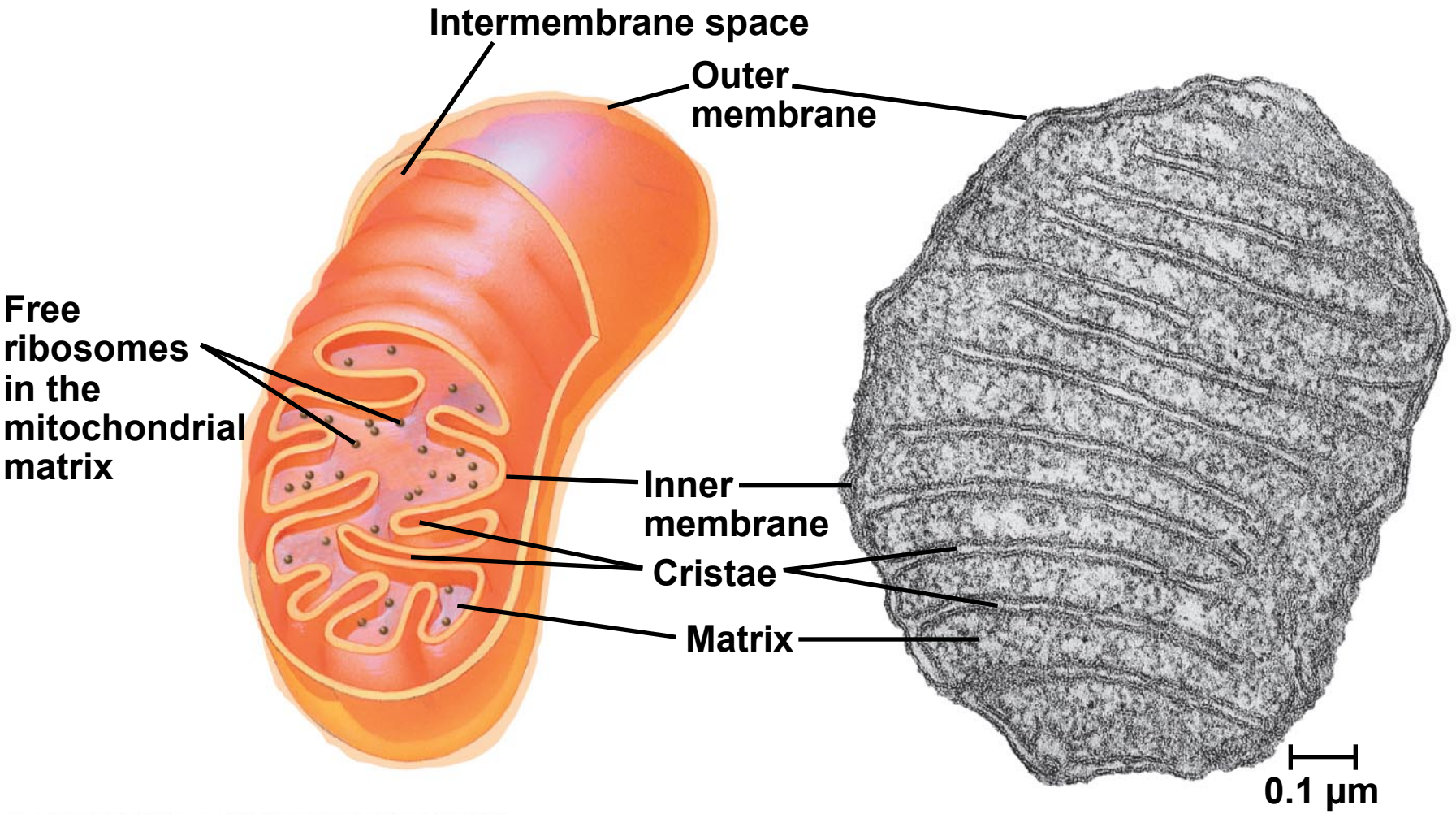

Nucleus
Rough ER
Smooth ER
cis Golgi
trans Golgi
Plasma membrane



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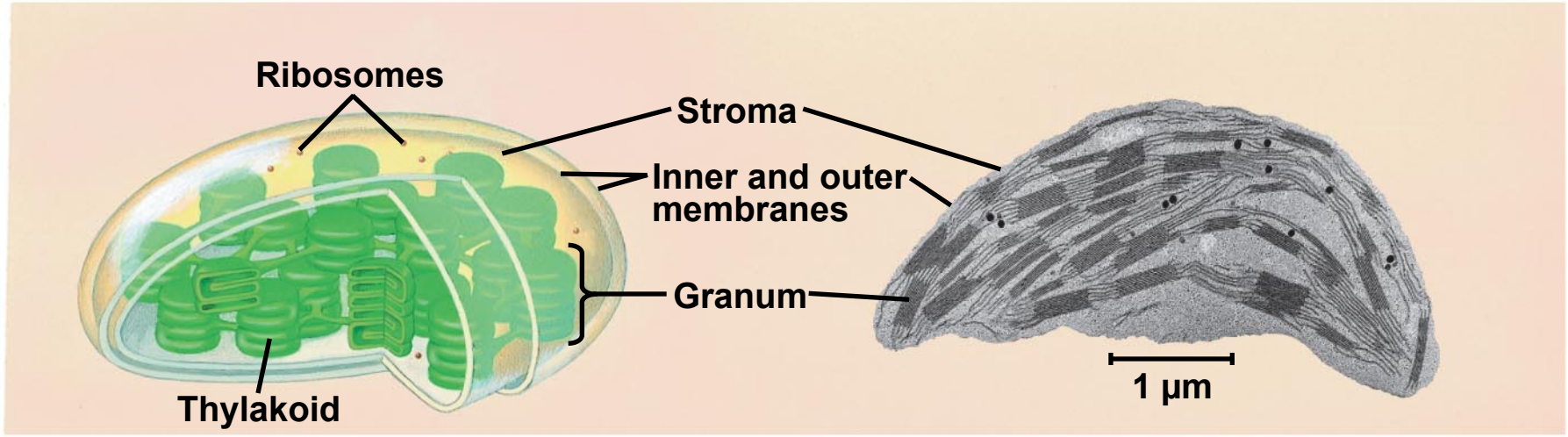

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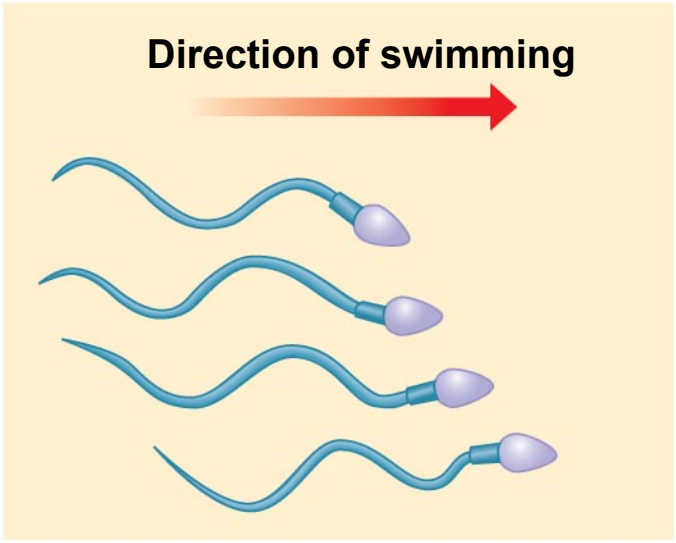
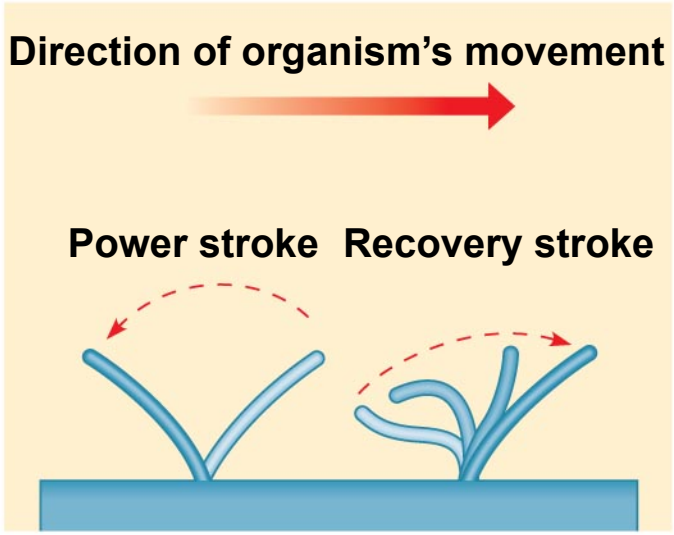
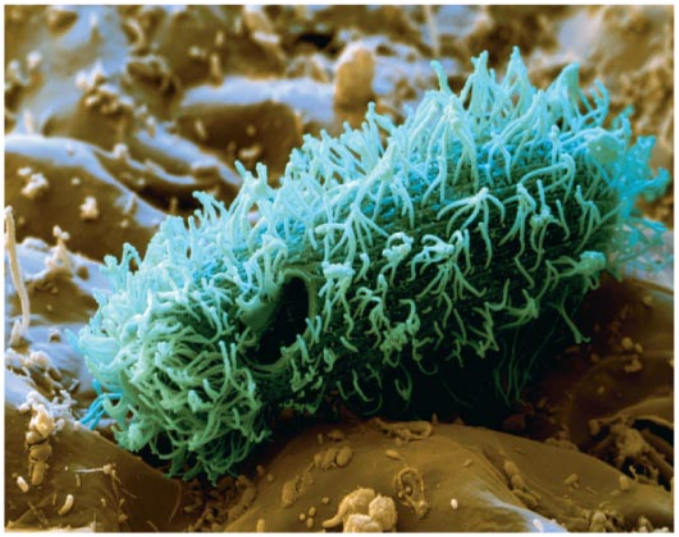


(a) Motion of flagella



(b) Motion of cilia



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