

# Quiz 3 Material

Cytoskeleton & MFs;  
Actin & Polymerization-Based Motility (MFs);  
Actin & Motor Protein-Based Motility (MTs);  
Actin-Myosin Systems (MTs); MT Motors; Mitosis;  
Mitosis & Cytokinesis; Cilia; IFs;  
Mitochondria (Structure, Genome, & Origins);  
Mitochondria (Protein Import)

*Mitochondria: Structure,  
Genome, & Origins*

# Mitochondria

- energy conservation organelle
- converts energy from food into major energy currency: ATP
- 2 membranes & 2 compartments:
  - **outer** membrane = derived from phagocytic membrane
  - **intermembrane** space
  - **inner** membrane = includes cristae; derived from PM of 1<sup>st</sup> mitochondria
  - **matrix** space = enclosed by cristae