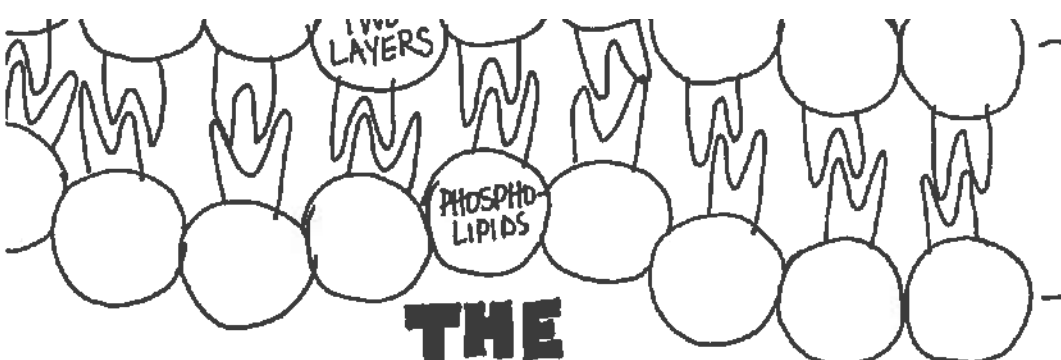
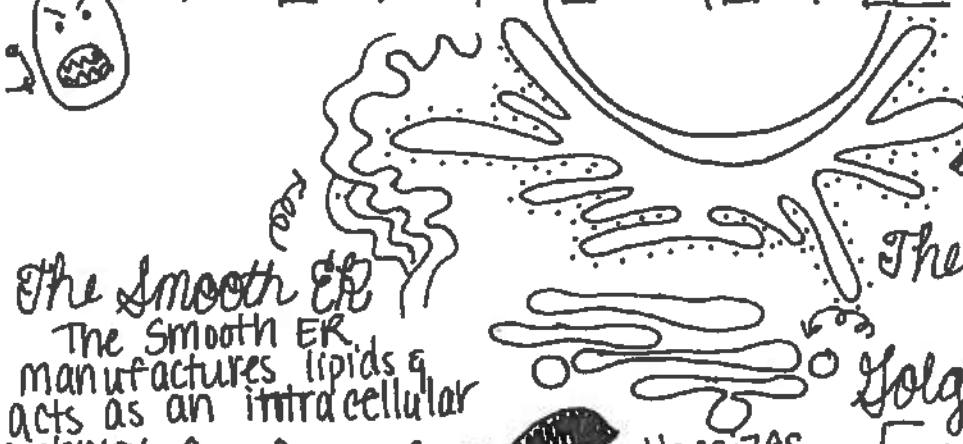




The Cell Membrane:
a selectively permeable gatekeeper

I'm a lysosome
I'm going to eat you.

THE ORGANELLES



The Smooth ER
The Smooth ER manufactures lipids & acts as an intracellular highway.



The Rough ER and Golgi apparatus

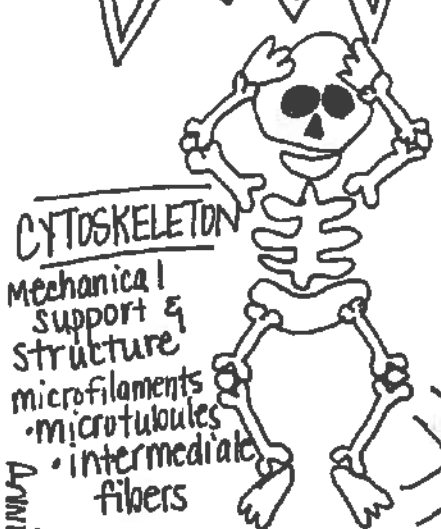
The Rough ER synthesizes proteins for export from the cell. The Golgi apparatus processes & packages materials into vesicles for export.

ribosomes synthesize proteins from AMINO ACIDS



MITOCHONDRIA

Synthesizes ATP energy



CYTOSKELETON
Mechanical support & structure
microfilaments
microtubules
intermediate fibers

Amnithkn

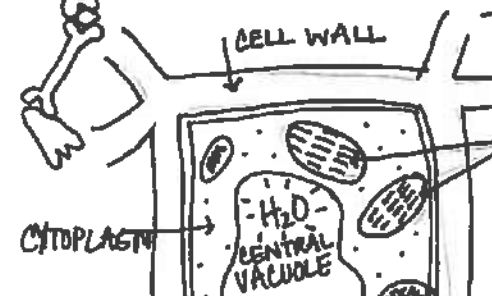
prokaryotes



- unicellular
- NO nucleus
- NO membrane-bound organelles

eukaryotes

- unicellular or multicellular
- contains a nucleus
- many organelles

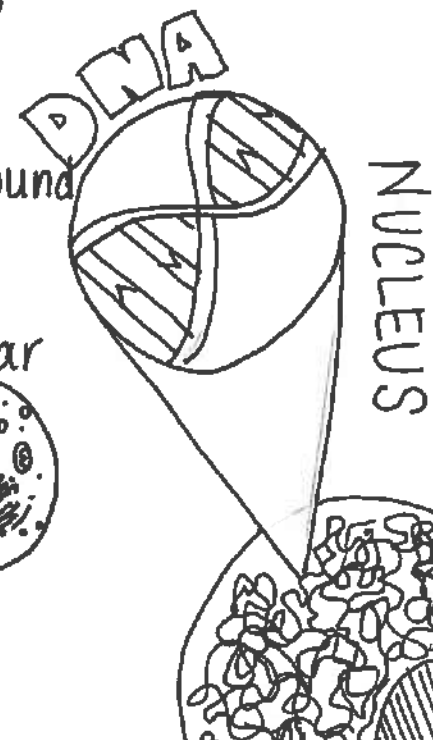


CELL WALL

CYTOPLASM

-H₂O-
CENTRAL VACUOLE

CHLOROPLAST:
create C₆H₁₂O₆ from H₂O & CO₂



DNA

NUCLEUS