

endomembrane: golgi, ER, lysosome etc

Test 1 end

Vacuoles:

- in plants can be acidic + sometimes act like lysosomes
- in animals are usually just food vacuoles or contractile vacuoles
- can also be a space of waste (b/c it is an c-space) or a storage area of oils/proteins + especially the central vacuole pushes chloroplasts to the side so they get plenty of light + CO₂



mitochondria/chloroplasts probably came from prokaryotes eating other prokaryotes; this created eukaryotes

- mitochondria:
- has 2 membranes - inside one is convoluted (wavy)
 - this increases surface area
 - mitochondria have their own DNA which is not contained in the nucleus
 - mitochondria divide on their own; independently of cell
 - mitochondria can be killed chemically or surgically removed + they will not come back; so mit. come from mit.

chloroplasts:

- has its own DNA; also reproduces independently of cell reproduction
- can be removed from cell + they will not come back which proves independent reproduction
- dual membrane on outside + further mem. membranes on inside

* endosymbiotic theory

- mitochondria was 1st taken in b/c plants, animals + protists all have mitochondria

Peroxisome: organelle found in animals + plants

- all make hydrogen peroxide + breaks it down
- have 1 membrane; are not part of endomembrane system
- do not have DNA + do not independently reproduce
- likely endosymbionts