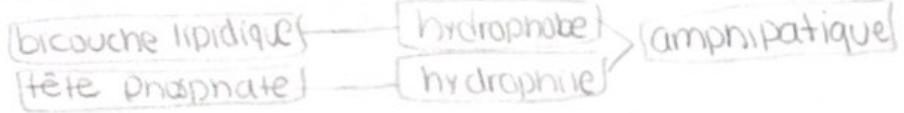


Anatomie d Eucaryote

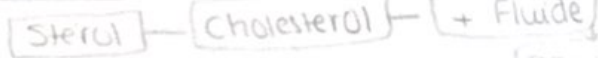
Memb. plasmique



Permeabilite' selectif



Solution



'capacité non charge'

entoure' de bicouche lipidique.

Organites

Mitochondrie (chloroplaste)

Synthèse ATP

Noyau — Genome

Appareil Golgi

Transportation

Exportation

RE — Synthèse protéine

lysosome — Digestion

Flagelle / cils

Cyindre Flexible

tubuline

continuité

couverture de MP

Paroi

Micro organisme

Faite de — Polymère de sucre

autre que — peptidoglycane

Cytosquelette

reseau proteique

microfilaments

Filaments intermediaire

microtubules

donne

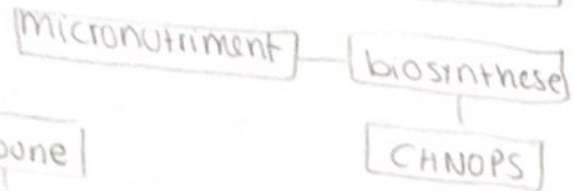
Forme d'

Crée compartiment (mur)

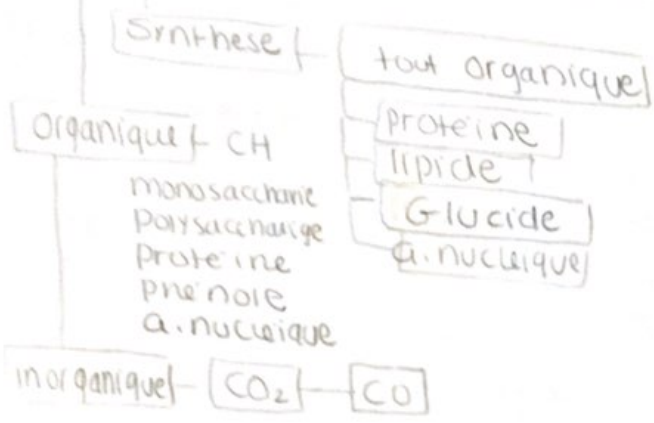
transport interne

motilité - glissement

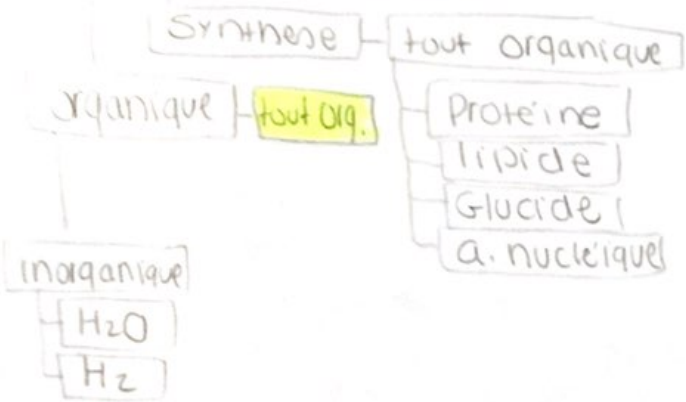
Nutrition



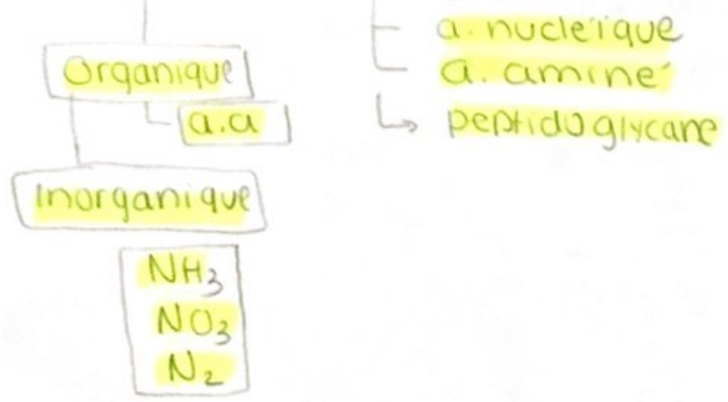
1. Carbone



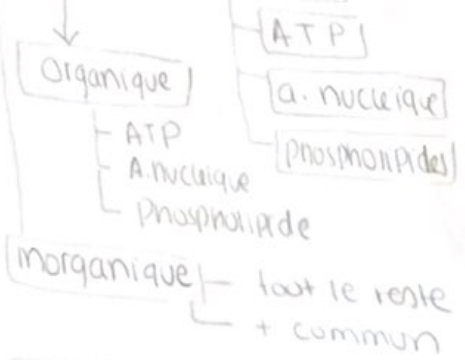
2. Hydrogène - Oxygène



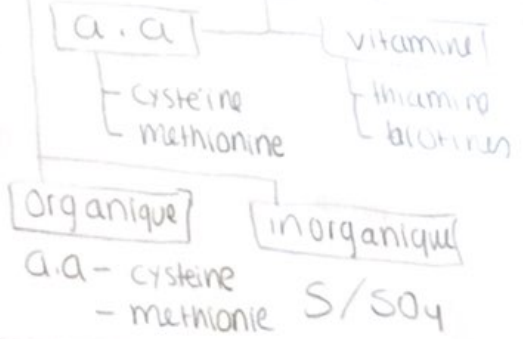
3. Azote



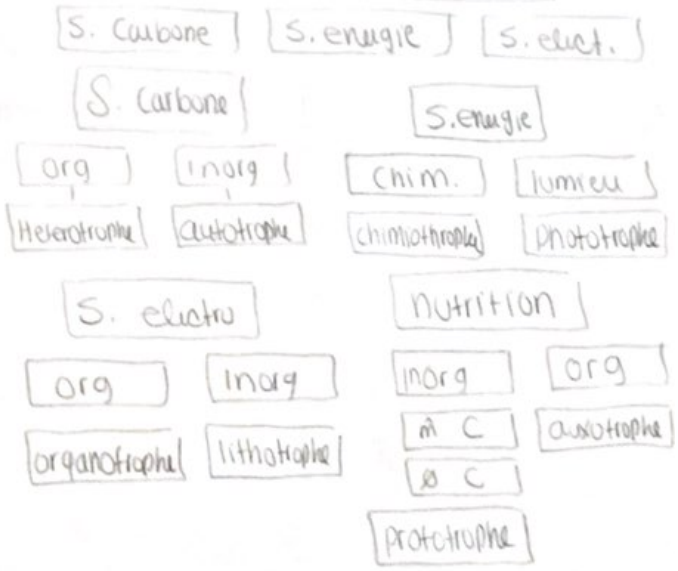
4. Phosphore



5. Soufre



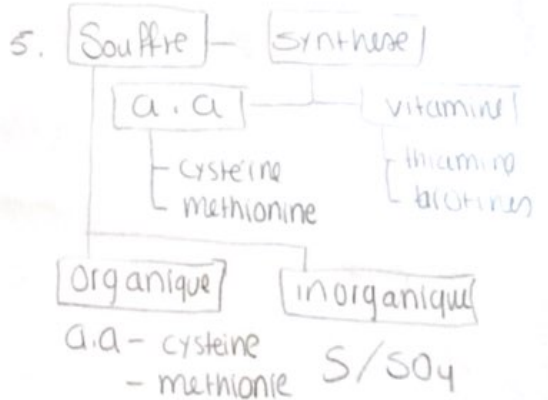
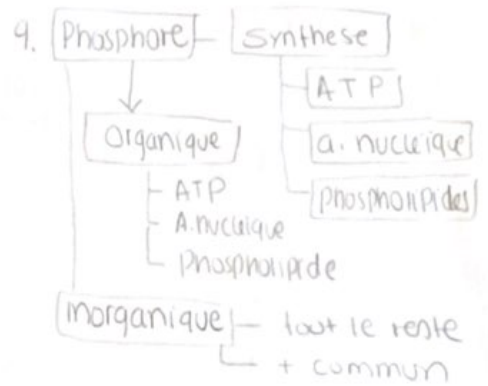
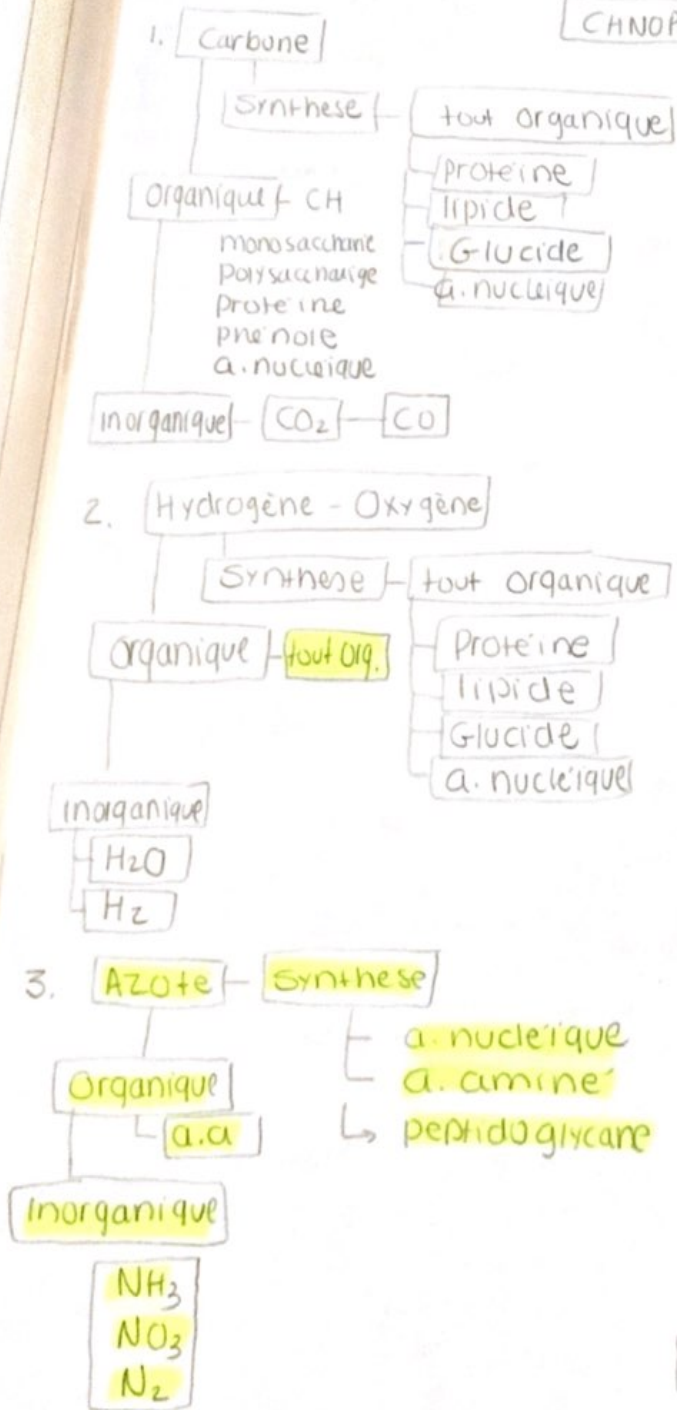
Classification nutritionnelle



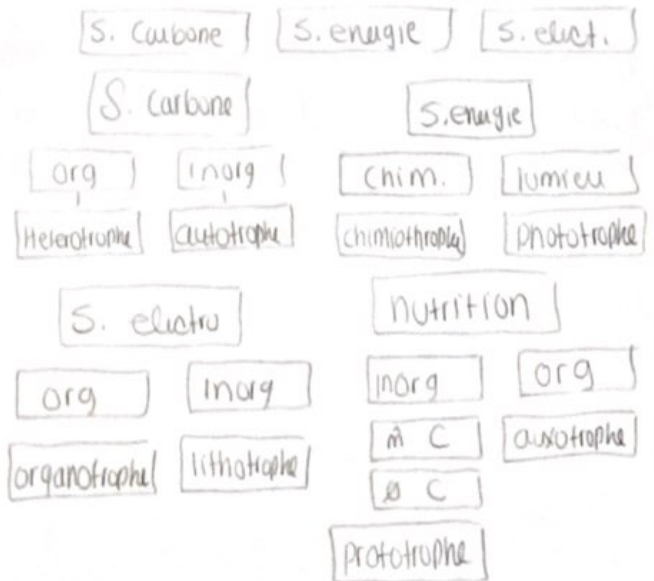
Nutrition

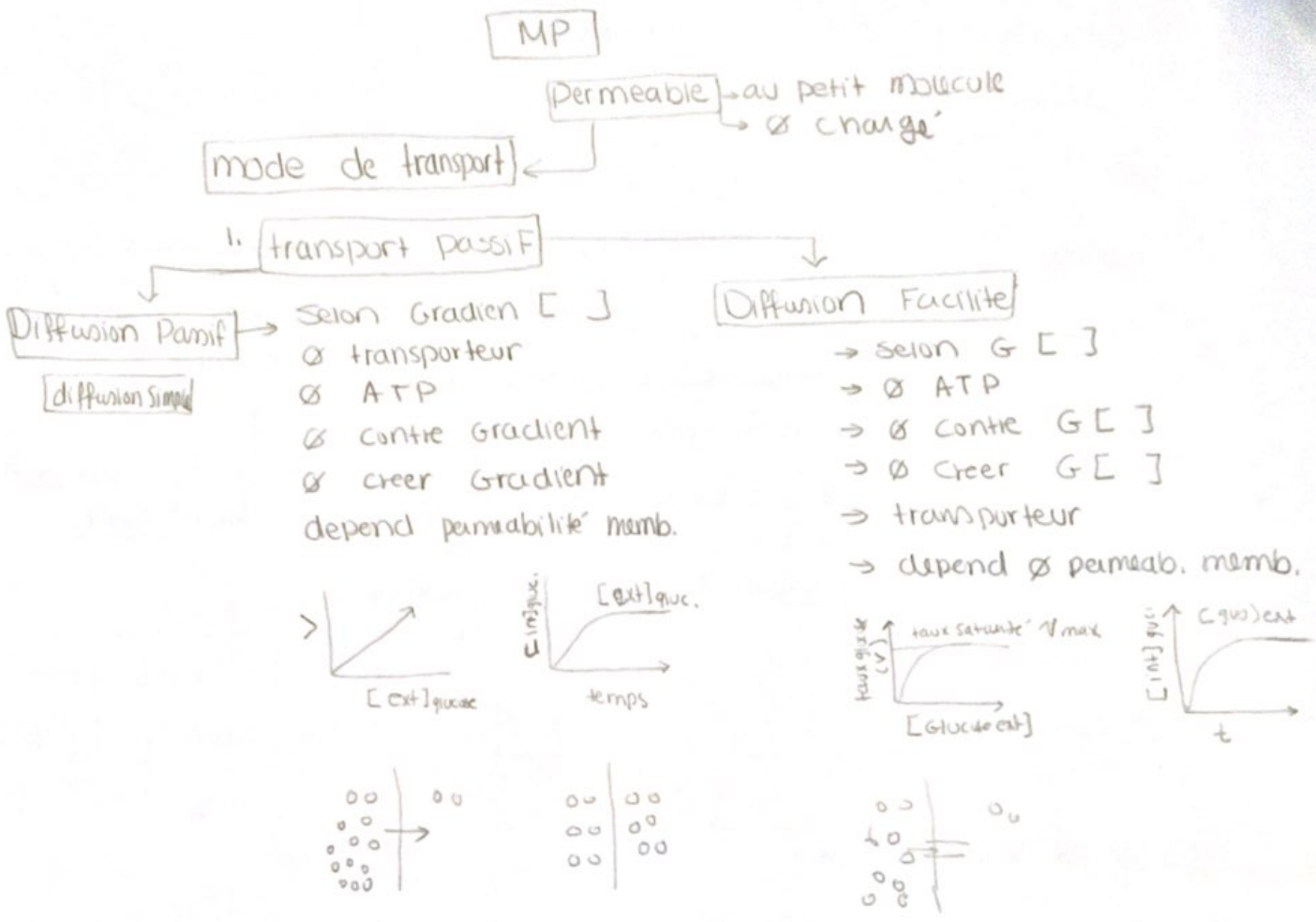
Micronutriments - biosynthèse

CHNOPS



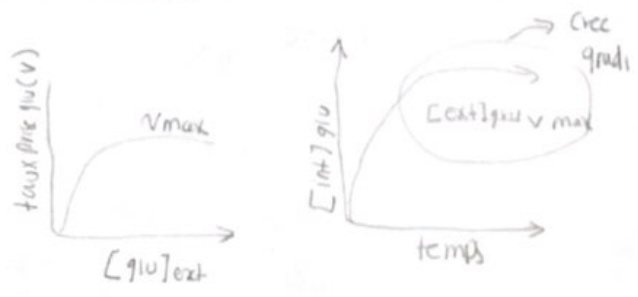
Classification nutritionnelle





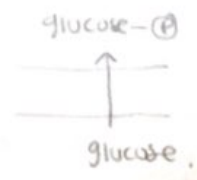
transport actif

- ↳ pas selon gradient
- ↳ contre gradient
- ↳ crée gradient
- ↳ transporteur
- ↳ ATP
- ↳ depend & permeabilite' memb.



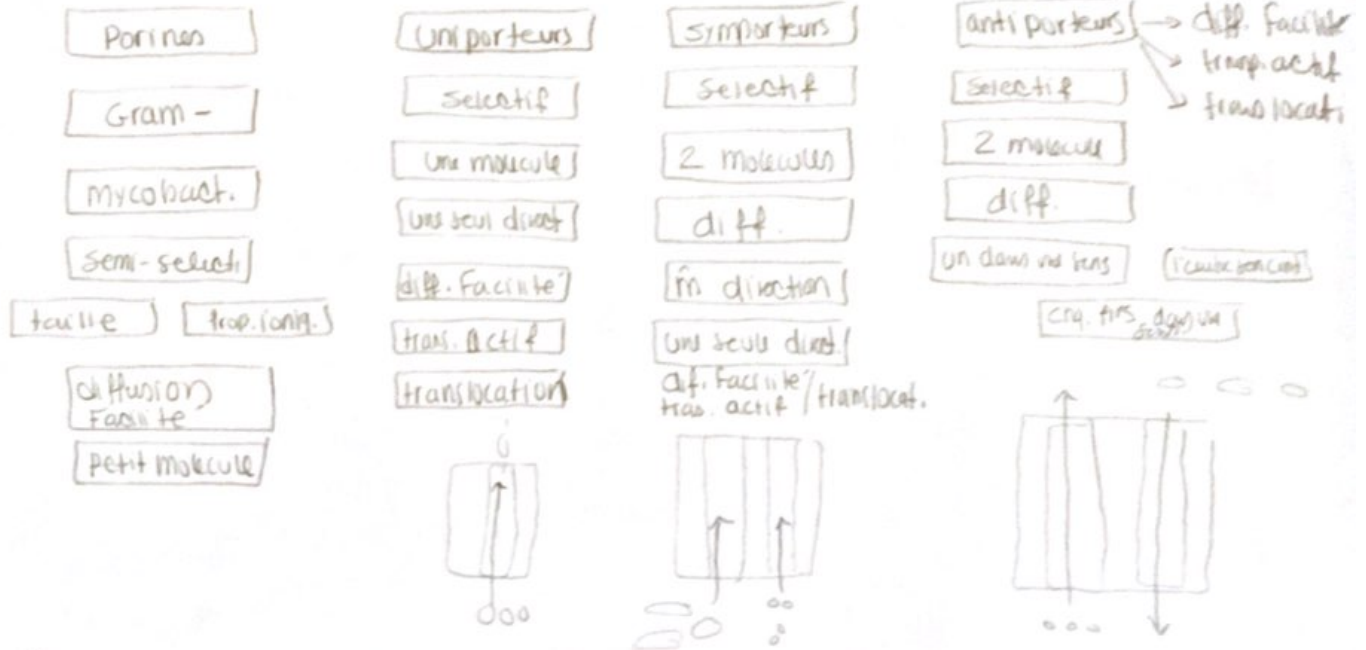
translocation

- ↳ pas selon gradient
- ↳ contre gradient
- ↳ crée gradient
- ↳ transporteur
- ↳ ATP
- ↳ depend & permeabilite'
- ↳ passage + conversion



Transporteurs

- protéines amphipatiques
 - protéines intégrales (transmemb.)



Osmose → déplacement eau

Tonicité

[Sté] impénétrable dissous
 Mouv. net eau
 Car sim eau
 se déplace
 Chang. Volume

Osmolalité

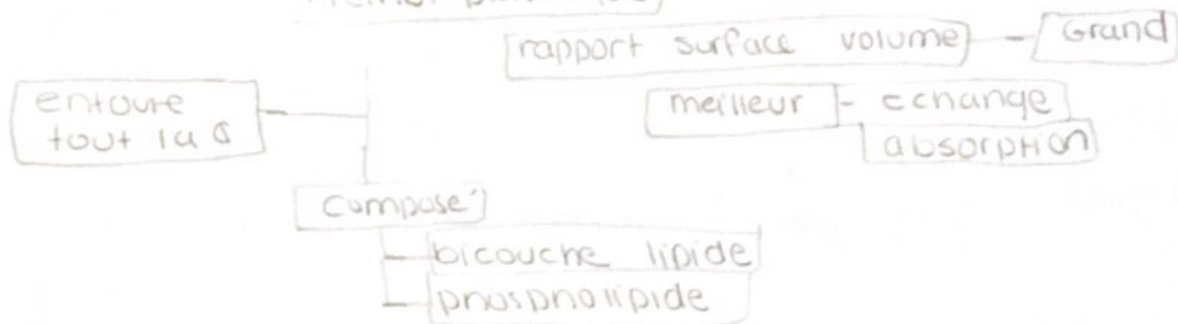
[Sté] perméable + imp dissous dans eau
 & mouv. net eau
 Car eau et sté perm.
 se déplace.
 & Chang. Volume

Calcul

1 osmole ← 1 mol impénétrable + 1 mol perméable → 2 osmole

Anatomie procaryote

Memb. plasmique



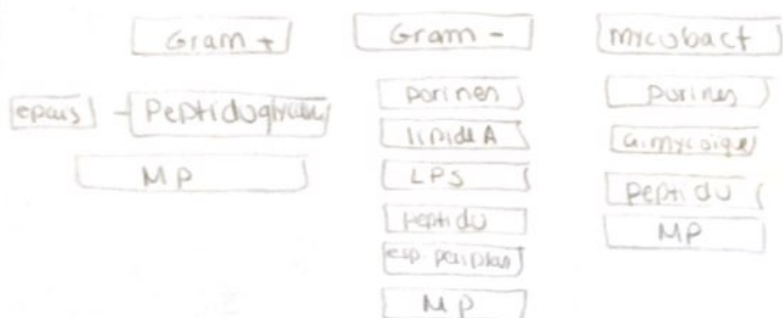
Barriere a permeabilite selectif - excretion dechet

Paroi G

Fct

- site Synthese ATP (Processus metab)

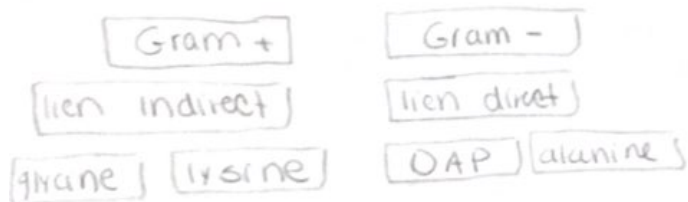
- resister Osmotique
- donne forme



Formation - paroi G

Pontage - entre 2 unite' peptidoglycane

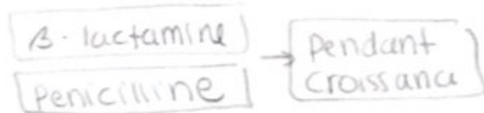
transpeptidation



Autolysine - cree pontage

→ Clive entre 2 unite' peptidoglycane et ajoute une autre unite pendant croissance

Inhibe Pontage



- affaiblir paroi
- resist. Osmot.

Detruit Pontage

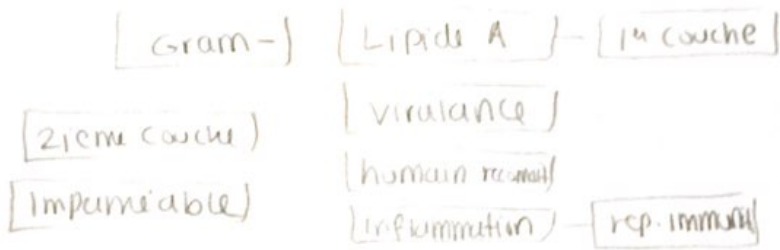
lysozyme

lien paroi detruit

- pendant croissance
- apres croissance
- β paroi
- resist. Osmot.

[Bicouche lipidique]

[LPS]



Pk Gram-resistant

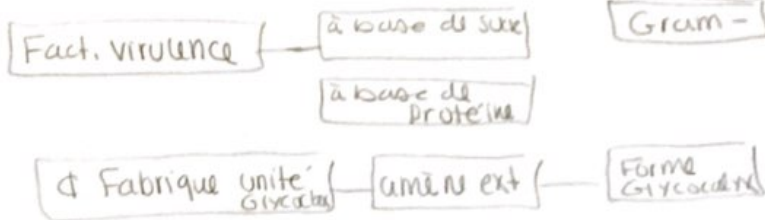
α [Lysosyme]
[Penicilline]

[Couche LPS]

[cible toxin]

⊗ possible → attend
|
[cible]

[Glycocalyx] - Couche supplément



[Capsule]

[Couche visqueuse]

rigide ←
bien org ←
fermement attaché à ⊕ ←

[protège contre le séchage]
[protège contre phago cyto]
[resist. env]
[adhesion.]

visqueux mal org.
biofilms
& fermement attaché à ⊕

[motilité]

[Fimbriae]
[S-U protéique]
[virulence]
[adhés]

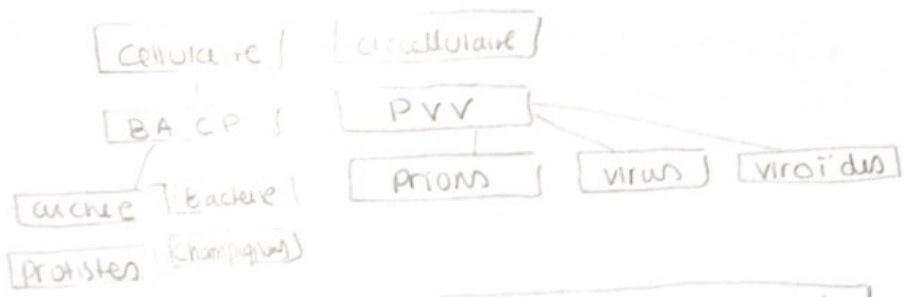
[Flagelle] [structure protéin]
[Flagelline] [bille-roule]
[Nage] [glissement]

[vésicule gazeuse]
[rigide]
[2 protéines]
[impénétrable à H₂O]
[perméable aux]
[bact. aquat]
[cytotub]
[flotte]

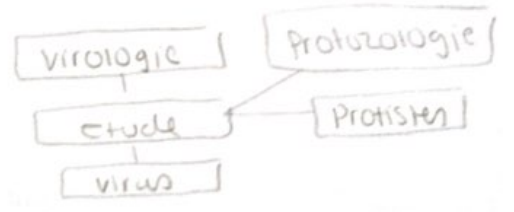
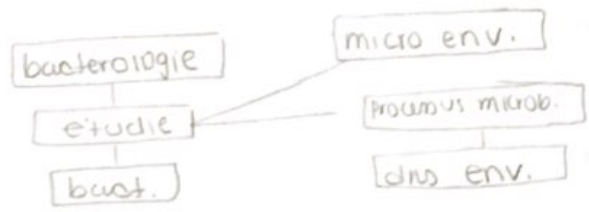
[crée une noyau infection]
[urine]
[enlève ⊕]

[Magnétosome]
[direction] [volant auto]
[Fe₃O₄]
[diamant minéral]
[Si / S⁻]

Microbiologie



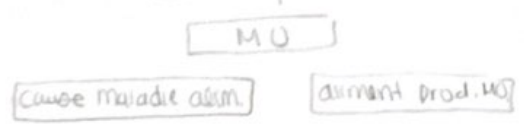
Domaine Microbio



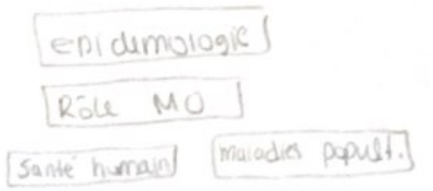
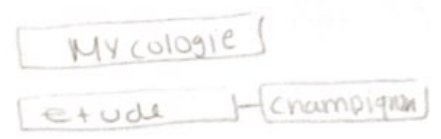
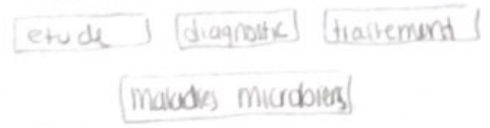
Microbio Indust.

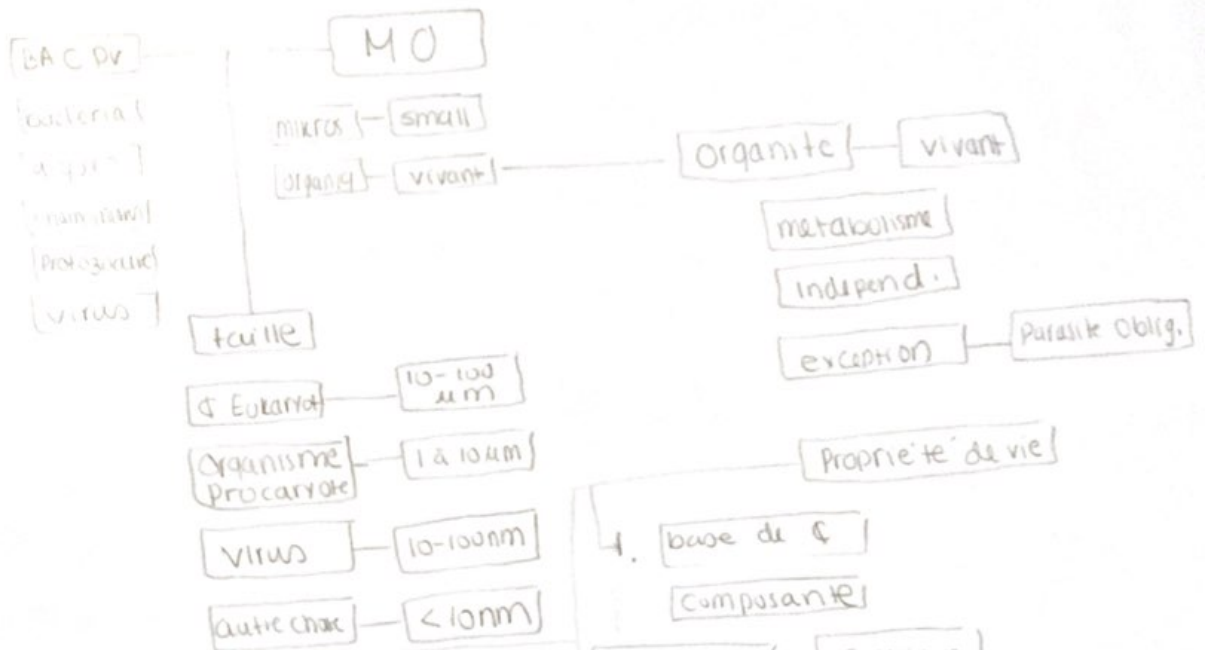


Microbio Aliment.



Microbio Medical.





5. **Nourrir**
- metabolisme
 - absorbe
 - trans forme
 - Chimique
 - Anabolisme
 - Catab.
 - simple-complex
 - complex-simple
 - genere
 - obtient
 - utilise
 - energie
 - elimination - dechets

6. **Obtient** - **Utilise**
- energie

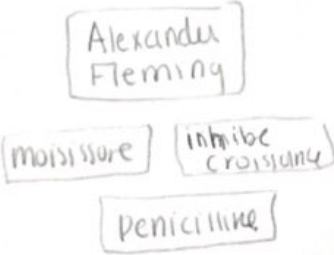
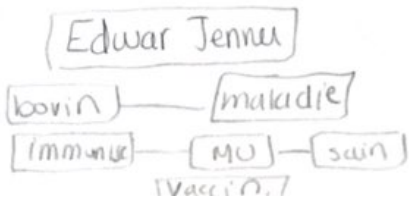
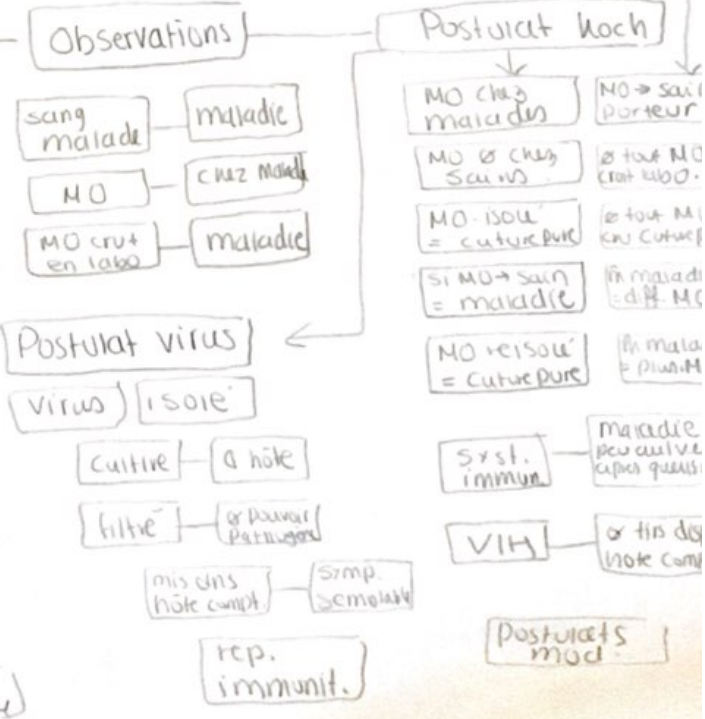
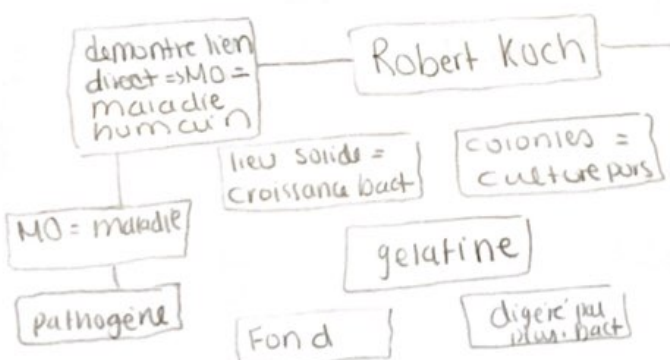
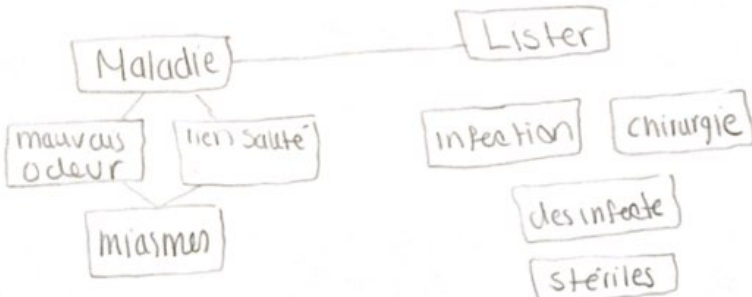
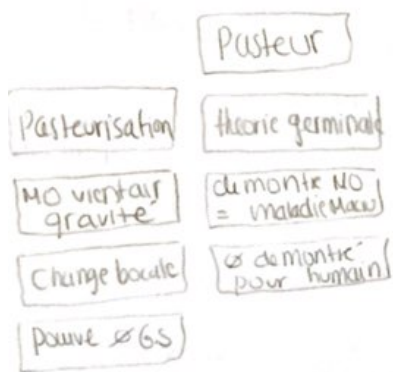
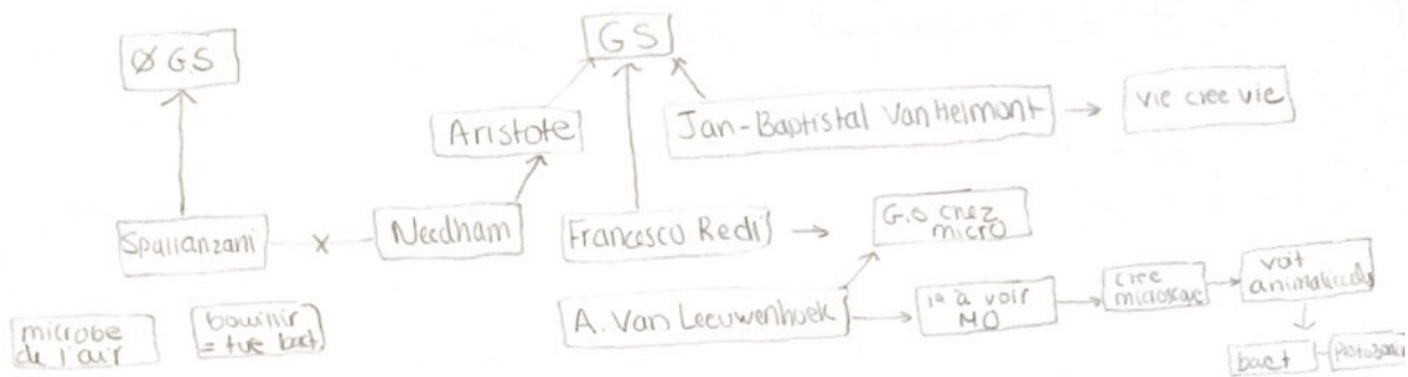
7. **adpt. evolutif**
- reagit - env.
 - caract. evol.
 - transmet genet.
 - gen. future

2. **Reagir à env.**
- survie
 - act. bio
 - photo tel vie - chimiotaxe
 - attric/repant - genre/repant
 - O₂ - chimie

3. **equilibre int**
- ↳ organisme
 - PH - Homeostase
 - osmot
 - T₀
 - [ste]

4. **reproduction**
- genre semb.
 - uni & / multi &
 - asexue / sexe
 - Fruct. binaire
 - Mut. Genet. info - genome
 - traduction
 - transcription

Structural	Chimique
MP	Polysaccharides
+/- Paroi	lipide
cytoplasme	Proteine
noyau/nucleoide	A. nucleiques
comparaison &	
Eucaryote	Procaryote
+1 molec. ADN	1 ms. ADN
mitotique	amitotique
noyau	nucleoide
memb. nucleaire	o memb. nucleaire
organites	o organites



Coorations

Fluorescent

vitale

metabolique

immunofluorescent

cible : d'importe quoi

Sytox

DAPI

vert

bleu

4 mort

3 mort
1 d. vert

Cible

ADN

CTC

metb. actif

metb. inactif

pas en cycle

pas en cycle

critere

CTC

trans forme

2 trans forme

CTC

2 Fluorescent

Fluorescent

urine active

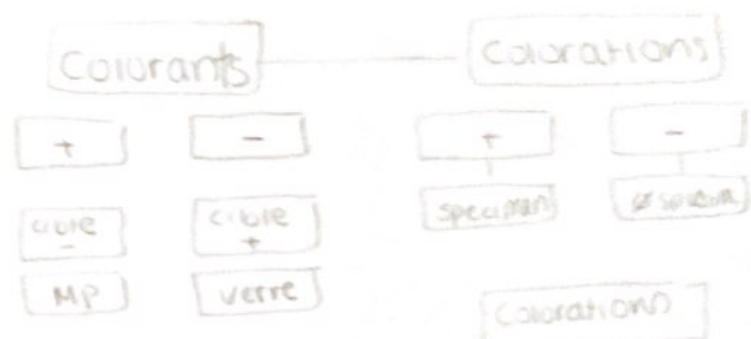
antigenes surface

anticorps

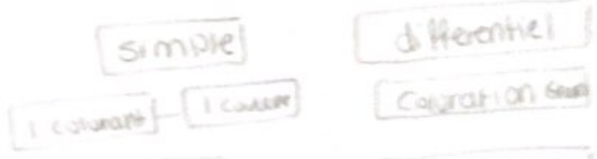
Fluorescent

(A)-(B)

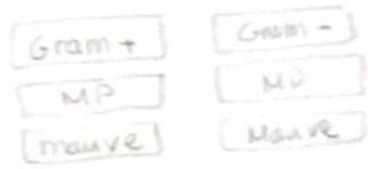
discrimination
diff. b. actif



Colorations



crystal violet



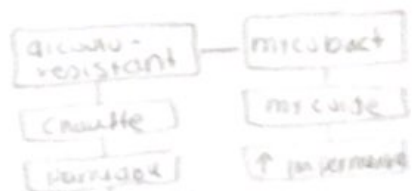
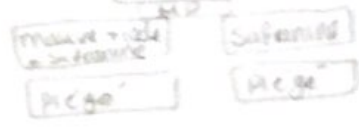
iode



lave alcool



safranine



↑ permanent

