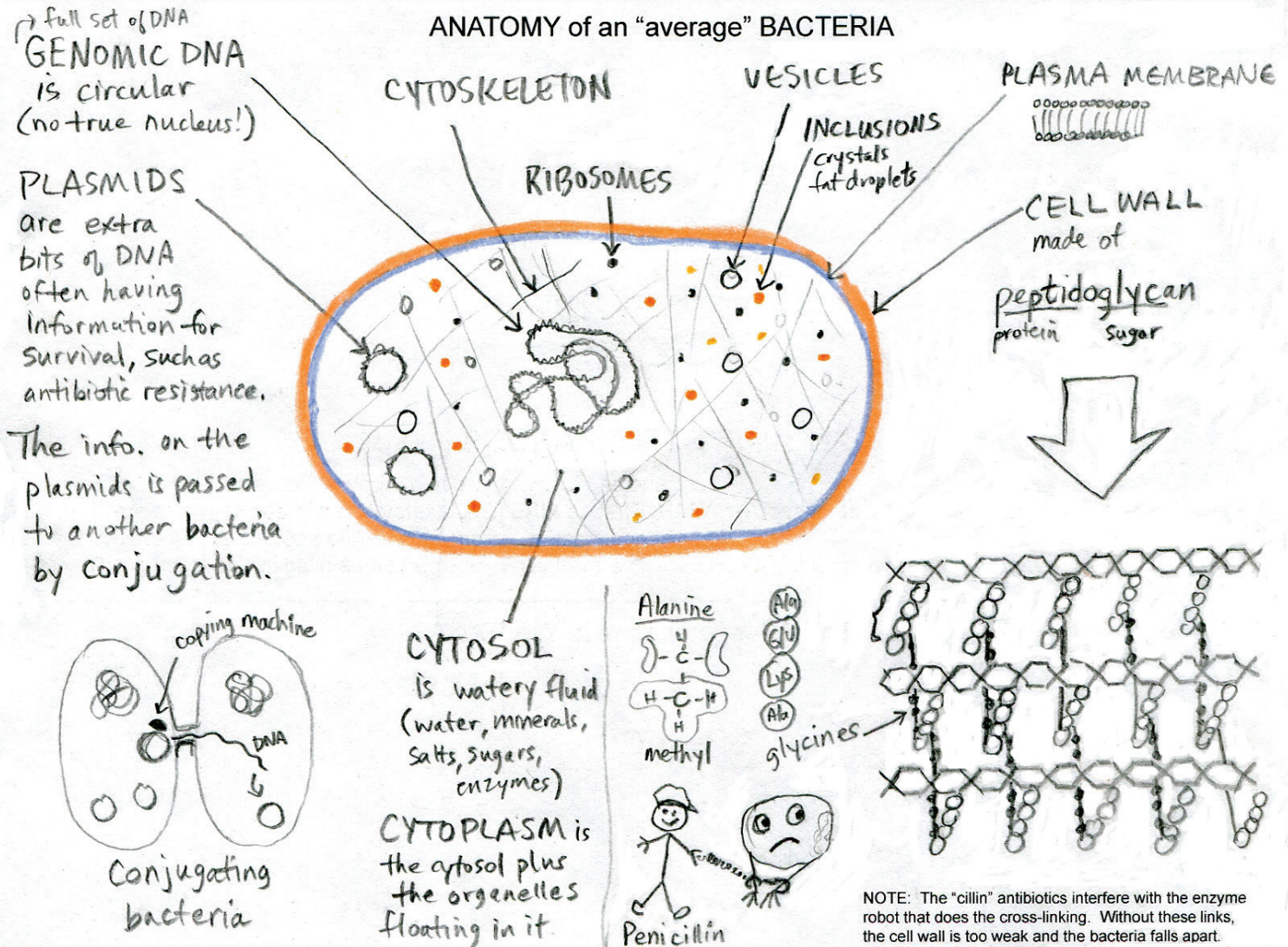


# PROKARYOTES (part 1)

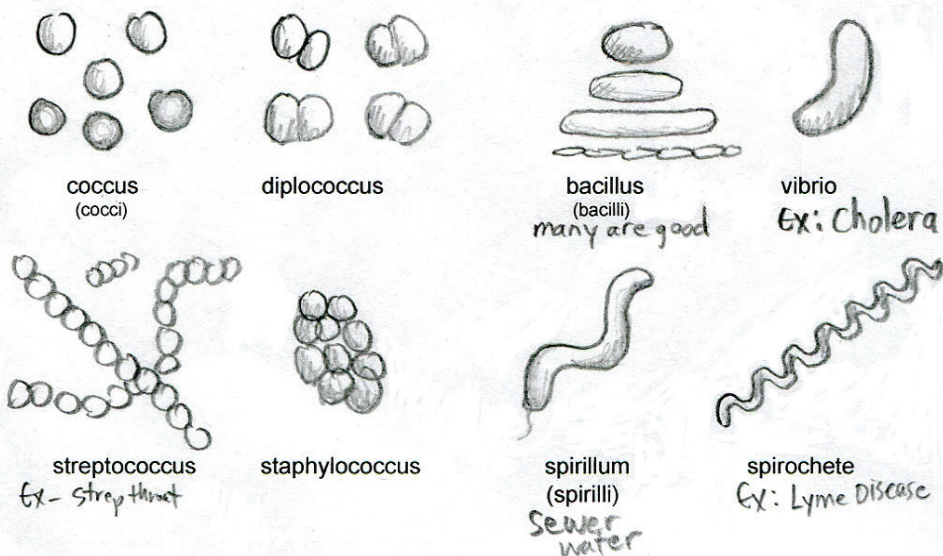
16

- For every 1 human cell in your body, you have 10 bacteria cells.
- There are two types of prokaryotes: BACTERIA and ARCHAEA. (Archaea used to be classified as bacteria. They tend to be the "extremophiles" who survive in harsh conditions.)
- Prokaryotes do not have a true nucleus. They have a clump of DNA but it does not have an envelope around it.

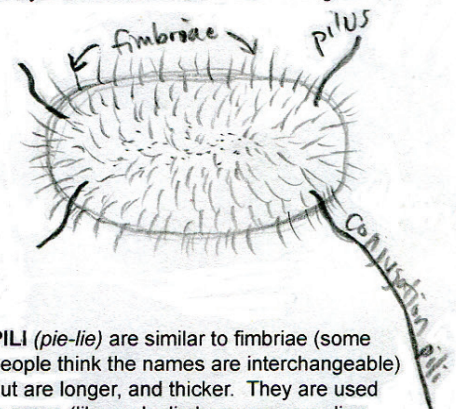


## MORPHOLOGY (means "shape")

(SIZE: 1 to 3  $\mu\text{m}$ )



**FIMBRIAE** (fim-bree-eye) are little "hairs" that allow the bacteria to stick to surfaces. They are more common in Gram negatives.



**PILI** (pie-lie) are similar to fimbriae (some people think the names are interchangeable) but are longer, and thicker. They are used to move (like rock climbers use grappling hooks). A "sex pilus" is very long and can grab another bacteria and "reel it in" until they touch. Then DNA can be shared.