



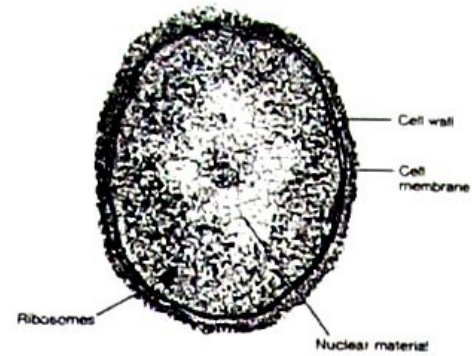
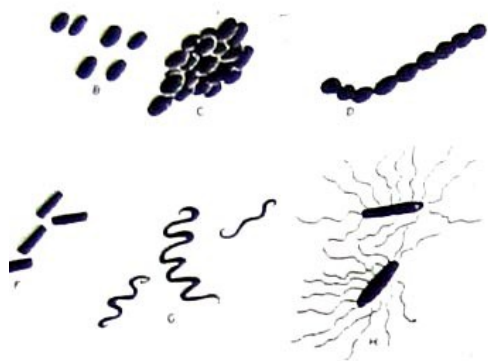
MONERANS

Bacteria

Marine

Science

One “celled” organisms.

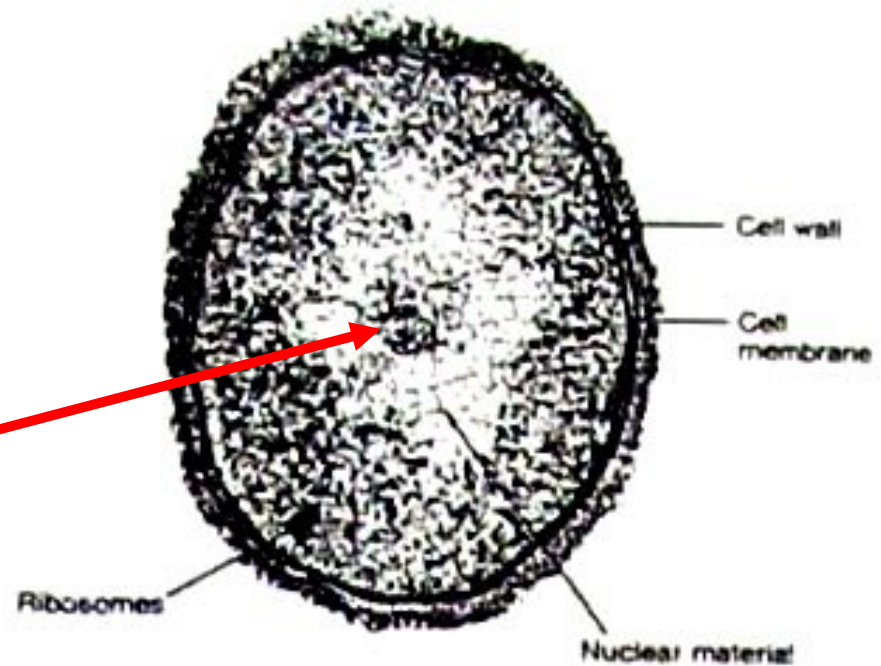


Bacteria do not typically have a complete cell structure. Monerans are the only kingdom of PROKARYOTES.

Prokaryotes

No nucleus or other membrane around the cellular organelles.

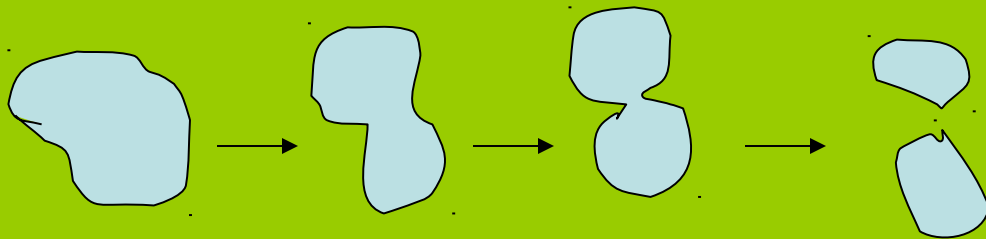
Often has a cell wall, but DNA is not membrane bound.



Replication

Binary Fusion.

This is a form of replication where the organism pinches off a new one by its cell wall just folding in on itself and cutting off the new part.



MOTION

Squirming or wiggling.
Many have a flagellum
or flagella for motion.



CLASSIFICATION

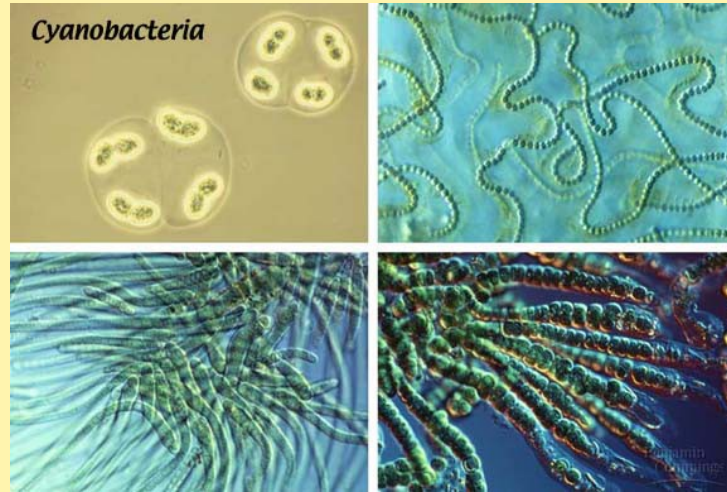


Archaeobacteria are old. Fossils date back to 3.5 billion years ago!

Thermoacidophiles are heat resistant and have been found in the boiling lakes of Yellowstone and similar places. Some believe they may hold medical cures or treatments.

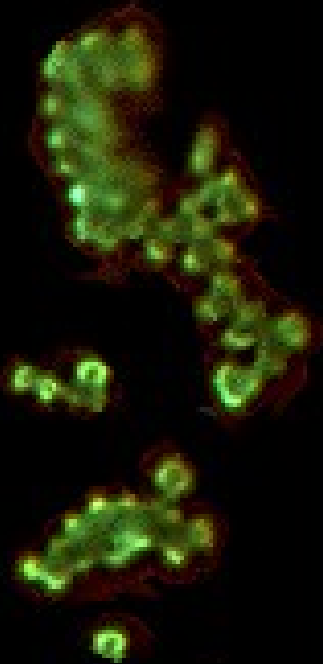
Methanogens are anaerobes that produce methane which live in your gut.

CLASSIFICATION



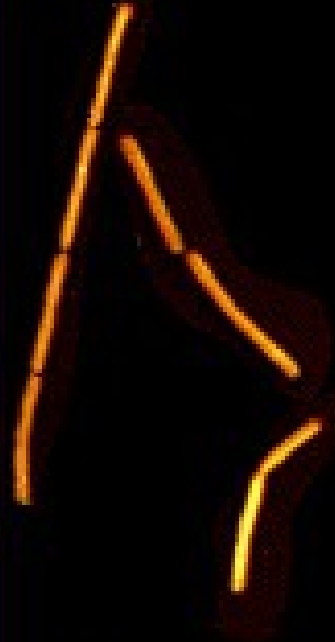
Eubacteria. The “true bacteria” are most common.

Shapes



cocci

Round.



bacilli

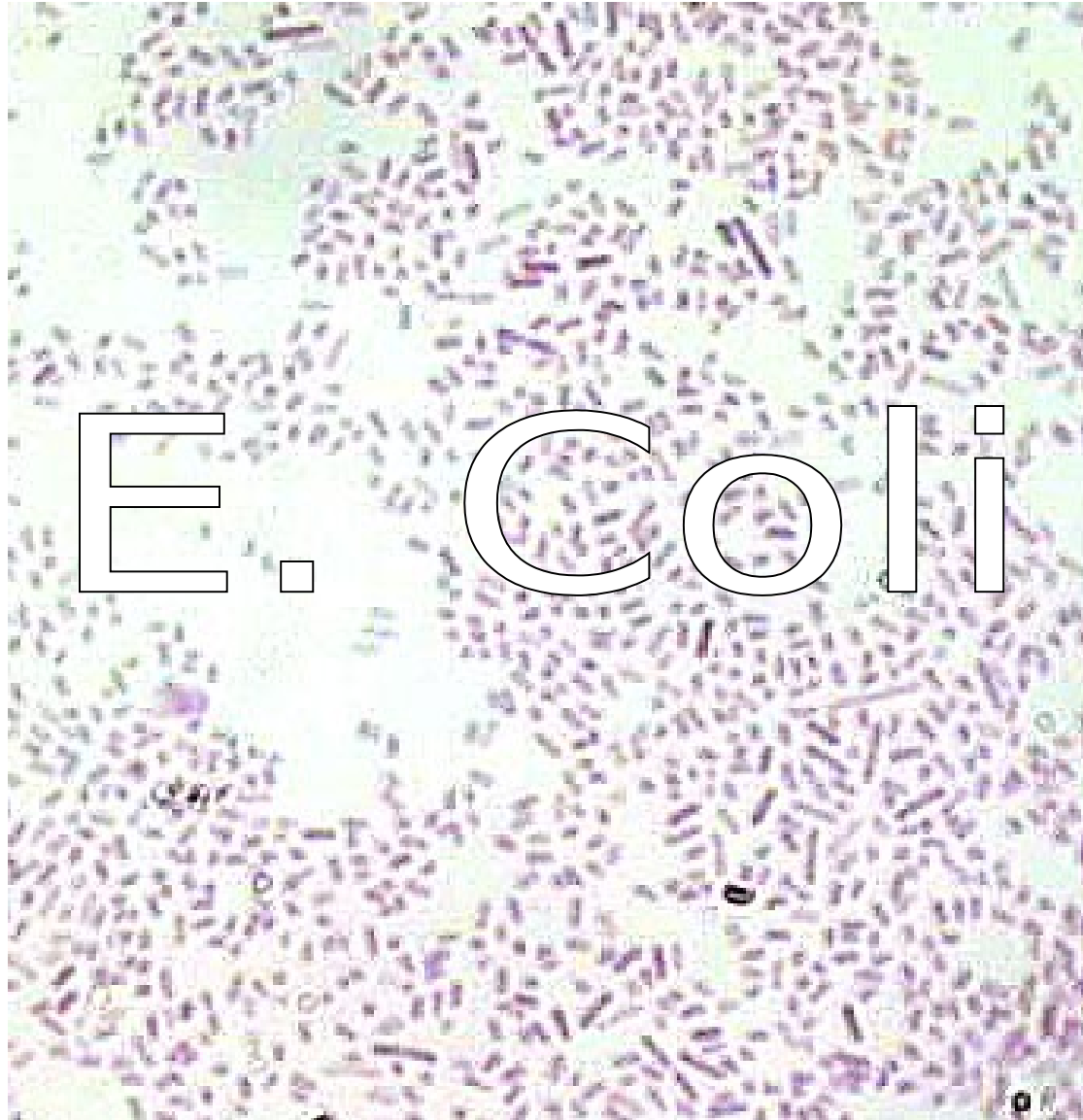
Rod-shaped.



spirilla

Spiral.

Bacterial names often include shapes.



Examples:

BACILLI:

Escherichia coli (affects our guts)

Lactobacillus spp. (tooth decay; ingredient in yogurt)

Bacillus anthracis (anthrax in sheep & humans)

COCCI:

Streptococcus spp. (strep throat)

Staphylococcus spp. (staph & gangrene in untreated wounds)

Streptomyces spp. (medicine streptomycin)