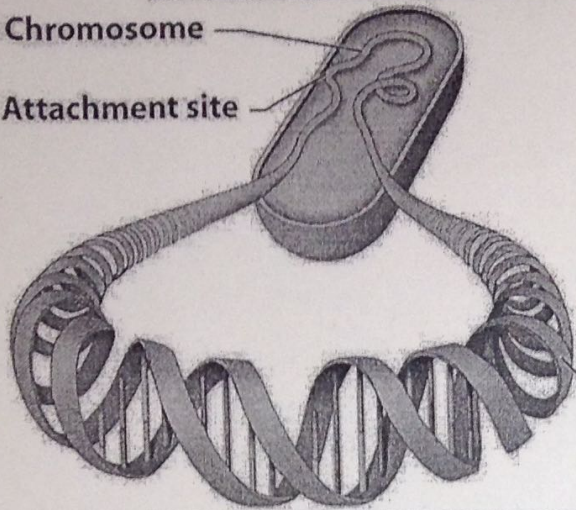


PROKARYOTIC AND EUKARYOTIC CHROMOSOMES

PROKARYOTIC CELL

Chromosome

Attachment site



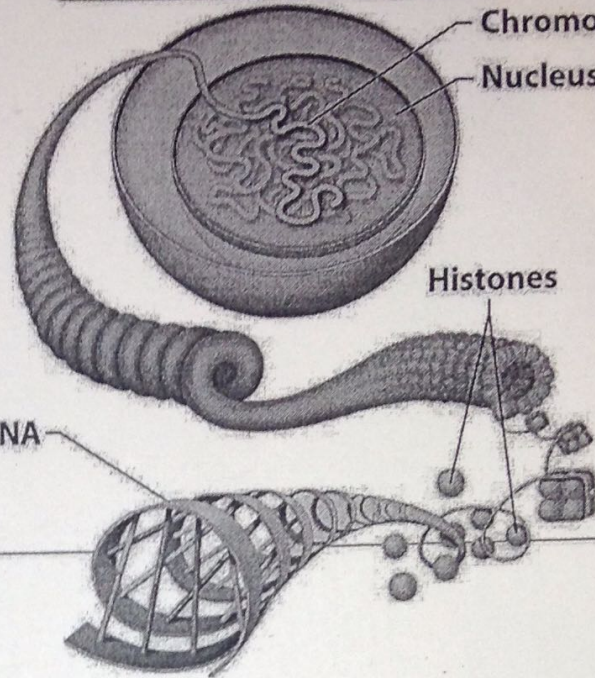
EUKARYOTIC CELL

Chromosome

Nucleus

Histones

DNA



Bacterial DNA

Plasmids

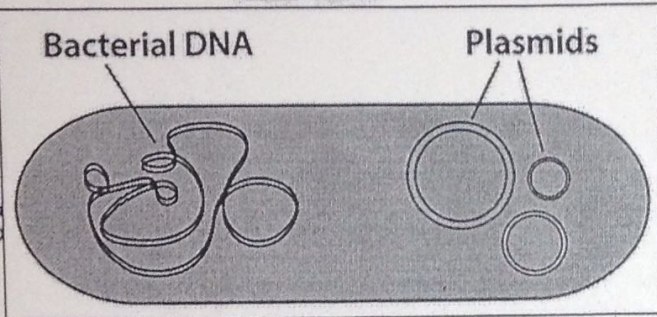


Fig
Wha
© 20

Prokaryotes

- 1 chromosome
- Chromosome circular
- DNA "naked" - not associated w/ histones
- Chromosome attached to the cell membrane (Nucleoid region)
- Plasmids = small, circular piece of DNA w/ just a few genes that usually code for antibiotic resistance

Chromosomes
Made out of
DNA

DNA replication
using the same
enzymes.

Eukaryotes

- Multiple Chromosomes
- Chromosomes linear.
- DNA wrapped around proteins called histones
- Chromosomes found in nucleus
- No plasmids

Replicate independently of the cell / chromosome.
Can be traded to similar types of bacteria + even between different species of bacteria.