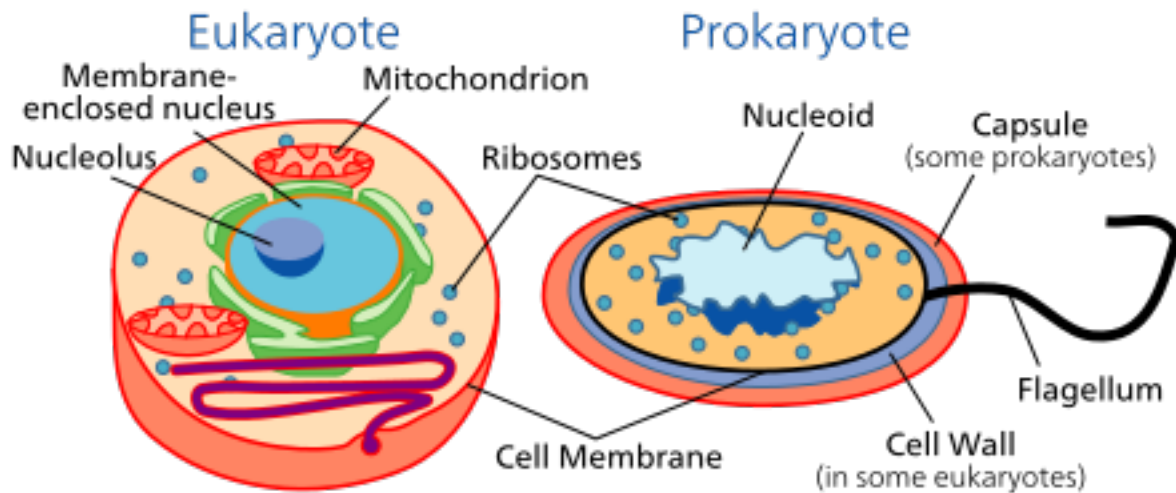


CONCEPT: COMPARISON OF PROKARYOTES AND EUKARYOTES

Characteristic	PROKARYOTES	EUKARYOTES
DNA structure	Circular <i>nucleoid</i>	Linear <i>chromosome</i>
DNA storage	Free-floating in cell	In <i>nucleus</i> that contains <i>nuclear envelope</i>
Has <i>nucleus</i>	×	✓
Has internal membranes	×	✓
Has <i>plasma membrane</i>	✓	✓
Has complex <i>cytoskeleton</i>	×	✓
Divides by...	<i>Binary Fission</i>	<i>Mitosis or Meiosis</i>
<i>Daughter cell</i> DNA	Full copy of parental DNA	½ copy of parental DNA
Classification domain	Archaea and Bacteria	Eukaryota

EXAMPLE: Prokaryotic cell vs. Eukaryotic cell



PRACTICE:

1. Which cell type has a nucleus?
 - a. Prokaryotic
 - b. Eukaryotic
 - c. Both
2. Which cell type divides via binary fission?
 - a. Prokaryotic
 - b. Eukaryotic
 - c. Both

3. Which cell type has a plasma membrane?
- a. Prokaryotic
 - b. Eukaryotic
 - c. Both