

Inquiry Question

Prokaryotic vs Eukaryotic cells. What are the differences and similarities between these major groups?



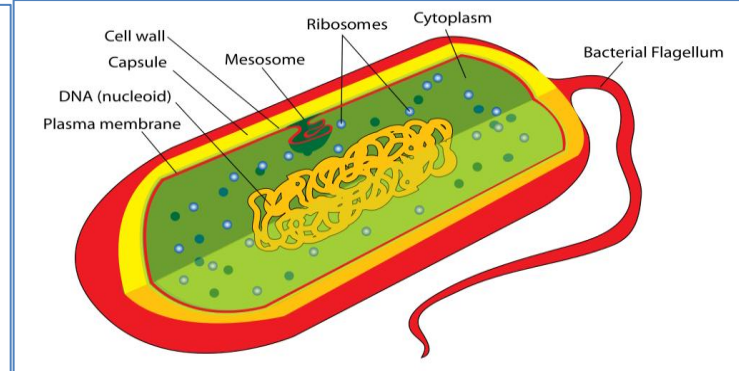
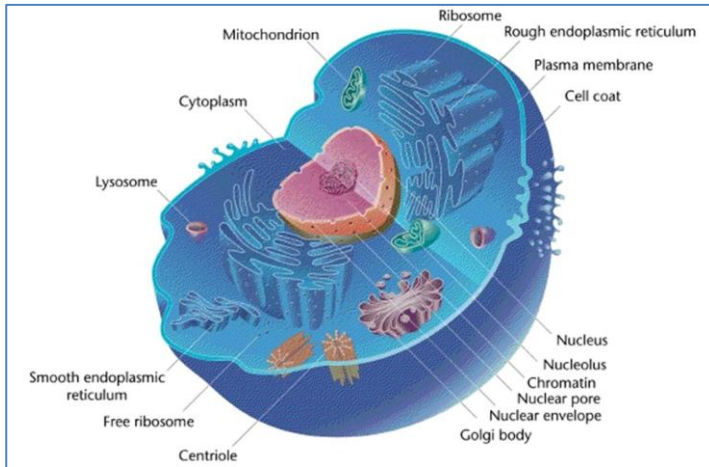
You work as a court stenographer, typing out everything that is said or done in a court room. Today, a highly anticipated case is going to trial and you were called in to transcribe all that happens in the case. Prokaryotic cells are taking on Eukaryotic cells in a dramatic suit where prokaryotic cells feel that all cells should be considered the same. On the other hand, eukaryotic cells feel that the two types of cells should be in different groups, but of course they would all still be equal.

Instructions

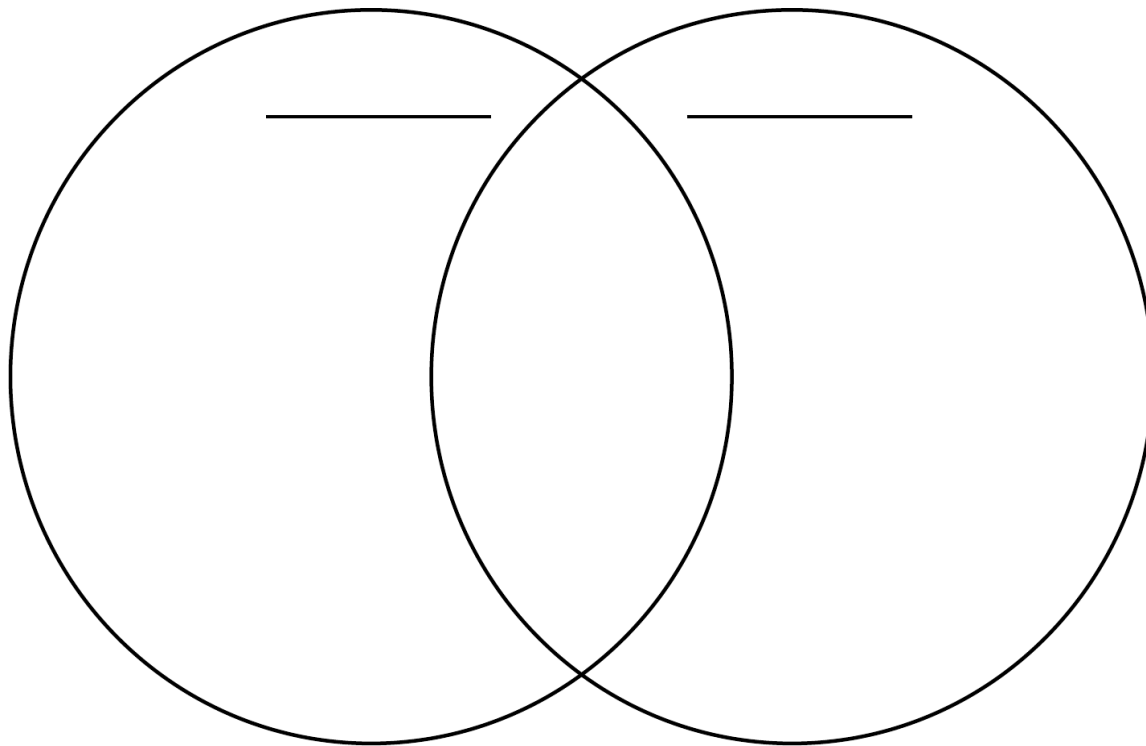
- ☐ Please read through the Unit 2 Lessons paying particular attention to the description of prokaryotic cells and eukaryotic cells
- ☐ Use the Venn diagram and following questions to organize your evidence for both types of cells. Research for further points you feel would be relevant to the case.
- ☐ Create a court transcript outlining the arguments and evidence for each side Include the following for each side (prokaryote and eukaryote).
 - Clear title for the court case
 - Opening statement
 - Direct examination – include images as evidence
 - Optional – cross examination
 - Closing statement
 - Judge's decision
 - Cited sources in APA formatting
- ☐ Please note that plagiarism will not be accepted and the project will receive a mark of 0.

Project Goals: to gain and demonstrate a better understanding of the differences and similarities between prokaryotic and eukaryotic cells

Cell Types: Compare/ Contrast



Directions: Complete the Venn diagram that compares pictures A and B. Then answer the questions.



1. Which cell would you consider more complicated and why?

2. Does the animal cell (A) have membrane-bound organelles? If so, list them.

3. Does the bacterial cell (B) have membrane-bound organelles? If so, list them.

4. Is there any other evidence that you feel would help prokaryotes win the argument “Prokaryotes should be considered the same as eukaryotes”?
