

Prokaryotes vs. Eukaryotes Worksheet

Data Table and Observations

Slide Name	Sketch	Observations	Prokaryotic or Eukaryotic
Cork			
Mouth smear			
Spirulina			
Stagnant water			

Post-Lab Questions

1. Explain three general differences between prokaryotic and eukaryotic cells.

2. Complete the chart below comparing the specific differences between prokaryotic and eukaryotic cells.

	Prokaryotes	Eukaryotes
Approximate size (μm)		
Location of genetic material		
Genetic material membrane-bound		
Replication mechanism		
Contains plasmids		

3. Based on the information in the *Background* section and the chart above, which of the observed slides are classified as prokaryotic? Explain your answer.

4. Would you predict that the presence of capsules is an advantage or disadvantage in prokaryotes? Explain.

5. Protists were the first known eukaryotes. Why might they be important to the study of eukaryotic evolution?