

Cell Membrane Permeability Worksheet

Data Table 1. Neutral Red and Yeast

	Color
Color of neutral red and sodium bicarbonate	
Color after adding hydrochloric acid	
Color of yeast suspension	

Data Table 2. Yeast–Neutral Red Suspension

	Color
Initial color	
Color after 5 minutes	

Data Table 3. Filtered Yeast–Neutral Red Suspension

	Color
Color of yeast cells	
Color of liquid	

Data Table 4. Boiled Yeast–Neutral Red Suspension

	Color
Initial color	
Color after boiling	

Data Table 5. Yeast–Neutral Red Suspension with Bases

	Color
Color with sodium hydroxide	
Color with potassium hydroxide	
Color with ammonium hydroxide	

Post-Lab Questions

1. Explain the color change observed in the yeast–neutral red solution in Data Table 2.
2. Explain the color change observed in the boiled yeast–neutral red solution in Data Table 4.
3. Based upon the observations in Data Table 5, is there any evidence for transport of the bases across the yeast cell membrane? Explain.