

# Lab Rubric: Osmosis in Red Onion

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

Attribute		Description	Points Possible	Earned
<b>Final Draft Quality Attributes</b>				
<b>Ink and Legible</b>		Everything but lab drawings is Typed or written in standard blue or black ink & legible	<b>1</b>	
<b>Neatness</b>		All lines are drawn with a straight edge	<b>1</b>	
<b>Cover Page Attributes</b>				
<b>Hypothesis</b>		If...then...because format	<b>1</b>	
		Plausible scientific reason, based on unit concepts	<b>1</b>	
<b>Cover Page Complete</b>		The problem statement is copied onto the cover page and the procedure for the lab is written, similar to handout	<b>1</b>	
<b>On Time and Complete</b>		A stamp is present (.5 pt for stamp BUT)	<b>1</b>	
<b>Cell Diagram Data Collection Attributes</b>				
<b>Initial Red Onion Cell</b>	<b>Cell Drawing</b>	Drawing: 1) follows lab drawing rules 2) replicates patterns seen in the specimen 3) is labeled with all relevant structures	<b>3</b>	
	<b>Stamp</b>	Present	<b>1</b>	
<b>Onion Cell in 10% Salt Solution</b>	<b>Cell Drawing</b>	Drawing: 1) follows lab drawing rules 2) replicates patterns seen in the specimen 3) is labeled with all relevant structures	<b>3</b>	
	<b>Stamp</b>	Present	<b>1</b>	
<b>Onion Cell in Tap Water</b>	<b>Cell Drawing</b>	Drawing: 1) follows lab drawing rules 2) replicates patterns seen in the specimen 3) is labeled with all relevant structures	<b>3</b>	
	<b>Stamp</b>	Present	<b>1</b>	
<b>Analysis Attributes</b>				
<b>Analysis Questions</b>		Questions 1-5 are answered in complete sentences and include a good scientific reasoning	<b>2</b>	
<b>Argumentation (Conclusion) Attributes</b>				
<b>Claim</b> <i>Conclusive statement</i>		Correctly answers the experimental question (or correctly states whether the hypothesis/prediction was correct).	<b>1</b>	
<b>Evidence</b>	<i>Highest data</i>	Discussed the trend in the vacuole in NaCl	<b>1</b>	
	<i>Lowest data</i>	Discusses the trend in the vacuole flushed with tap water	<b>1</b>	
<b>Reasoning</b>	<i>Linking</i>	Explains how the evidence supports the claim	<b>1</b>	
	<i>Scientific Explanation</i>	Provides a plausible (possible) scientific reason that explains the trend seen in the data.	<b>1</b>	
<b>Total:</b>			<b>25</b>	