



Visualizing Diffusion in Real Time Rubric

Very Good	Good	Fair
Lab A prediction questions are answered correctly and in complete sentences	Lab A prediction questions are answered correctly but not in complete sentences	Lab A prediction questions are not answered correctly nor in complete sentences
Pre lab questions are answered correctly and in complete sentences	Pre lab prediction questions are answered correctly but not in complete sentences	Pre lab prediction questions are not answered correctly nor in complete sentences
Iodine diffusion measurements are double checked and recorded in cm in table	Iodine diffusion measurements are not double checked but are recorded in cm in table	Iodine diffusion measurements are not double checked nor recorded in cm in table
Student carefully draws the final agarose plates and correctly labels	Student draws the final agarose plates and does not correctly label	Agarose plates are poorly drawn and not labeled
Student correctly explains diffusion result with a 0.25% plate	Student explains, but not clearly, diffusion result with a 0.25% plate	Student does not correctly explain diffusion result with a 0.25% plate
Student clearly can explain why the diffusion rates differ between the different plates	Student can explain why the diffusion rates differ between the different plates, but with some misunderstanding	Student cannot explain why the diffusion rates differ between the different plates
Student can clearly explain why the central iodine well does not change color	Student can explain why the central iodine well does not change color but with some misunderstanding	Student cannot explain why the central iodine well does not change color
Student can clearly explain what the Macroscale Nanoparticle Apparatus represents	Student can explain what the Macroscale Nanoparticle Apparatus represents but with some misunderstanding	Student cannot explain what the Macroscale Nanoparticle Apparatus represents
Student can clearly explain why some of the balls in the apparatus were able to diffuse and others not	Student can explain why some of the balls in the apparatus were able to diffuse and others not but with some misunderstanding	Student cannot why some of the balls in the apparatus were able to diffuse and others not.
Student can correctly answer what determines if an atom/molecule can diffuse through a substance	Student is somewhat unclear as to what determines if an atom/molecule can diffuse through a substance	Student cannot correctly answer what determines if an atom/molecule can diffuse through a substance

