

2021–22 NC Check-In Biology
Structure and Function of Living Organisms
State Item Statistics

	Content Standard	Item Number	Percent Correct by Item
Bio.1.1.1	Summarize the structure and function of organelles in eukaryotic cells (including the nucleus, plasma membrane, cell wall, mitochondria, vacuoles, chloroplasts, and ribosomes) and ways that these organelles interact with each other to perform the function of the cell.	1	59.5
		7	91.6
		13	49.1
		19	74.5
Bio.1.1.2	Compare prokaryotic and eukaryotic cells in terms of their general structures (plasma membrane and genetic material) and degree of complexity.	2	50.2
		8	51.6
		14	63.9
		20	62.4
Bio.1.1.3	Explain how instructions in DNA lead to cell differentiation and result in cells specialized to perform specific functions in multicellular organisms.	3	58.7
		9	46.4
		15	73.6
		21	54.5
Bio.1.2.1	Explain how homeostasis is maintained in the cell and within an organism in various environments (including temperature and pH).	4	56.1
		10	66.6
		16	83.4
		22	70.6
Bio.1.2.2	Analyze how cells grow and reproduce in terms of interphase, mitosis, and cytokinesis.	5	50.9
		11	63.7
		17	58.5
		23	46.5
Bio.1.2.3	Explain how specific cell adaptations help cells survive in particular environments (focus on unicellular organisms).	6	63.9
		12	81.7
		18	27.9
		24	66.8

Mean Percent Correct 61.4

Note: Results from this NC Check-In should not be compared across Check-Ins, districts, or the state. Each Biology NC Check-In assesses different content standards.