

Science : Biology

Grade 11



#	Essential Knowledge/Skill	Alignment
1	INQUIRY: I can plan and carry out a controlled scientific experiment.	NGSS Science & Engineering Practices: Asking Questions & Defining Problems, Planning & Carrying Out Investigations
2	DATA: I can effectively collect, process, and communicate scientific data and observations.	NGSS Science & Engineering Practices: Using Math & Computational Thinking
3	DEFENSE: I can construct an explanation using scientific evidence.	NGSS Science & Engineering Practices: Constructing Explanation & Designing Solutions, Engaging in Argument for Evidence, Analyzing & Interpreting Data
4	LIFE: I can analyze whether or not an organism is alive using various definitions of life.	HS-LS1-3 HS-LS1-6 HS-LS2-5
5	CELLULAR ENERGETICS: I can explain how organisms make and use energy to survive and reproduce.	HS-LS1-5 HS-LS1-7
6	ECOLOGY AND EVOLUTION: I can analyze the relationship between organisms and the environment and predict how	HS-LS2-1 HS-LS2-4 HS-LS2-7 HS-LS4-6 HS-LS3-2 HS-LS4-2 HS-LS4-3 HS-LS4-4
7	INTRO TO ANATOMY AND PHYSIOLOGY: I can describe how organs and systems work together to maintain homeostasis.	HS-LS1-2
8	CELLULAR DIVISION AND THE CENTRAL DOGMA: I can differentiate between the processes of mitosis and meiosis, describe the significance of the Central Dogma, and evaluate the result of mutations.	HS-LS1-1 HS-LS1-4
9	GENETICS: I can predict the pattern of inheritance through the use of pedigrees and Punnett Squares.	HS-LS3-1 HS-LS3-2 HS-LS3-3

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