

## Science : Physics

Grade 9



#	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	ENERGY: I can use mathematical and conceptual thinking to explain energy transfers.	HS-PS3
5	ELECTROMAGNETISM: I can use properties of electricity and magnetism to construct explanations of radiation, speakers, generators, and motors.	HS-PS4
6	WAVES: I can use wave models to properties to explain behaviors of sound and light.	HS-PS4
7	NEWTON'S LAWS: I can develop models and design solutions to predict and explain Newton's Three Laws of Motion.	HS-PS2
8	MEASURING MOTION: I can use mathematical expressions to predict and analyze the velocity, acceleration, and momentum of objects.	HS-PS2

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