Topic	Kinder §112.2	1st §112.3	2nd §112.4	3rd §112.5	4th §112.6	5th §112.7	6th §112.26	7th §112.27	8th §112.28	Biology §112.42	IPC §112.44	Chemistry §112.43	Physics §112.45	Earth Systems §112.49	Environmental Science §112.50	Aquatic Science §112.47	Astronomy §112.48
													Phy.5.F calculate the effect of forces on objects, including tension, friction, normal, gravity, centripetal, and applied forces, using free body diagrams and the relationship between force and acceleration as represented by Newton's second law of motion; Phy.6.B identify and describe examples of electric and magnetic forces and fields in everyday life such as generators, motors, and transformers; Phy.6.A use scientific notation and predict how the magnitude of the electric force between two objects depends on their charges and the distance between their centers using Coulomb's law;				
		1.7A explain how pushes and pulls can start, stop, or change the speed or direction of an object's motion:					6.7.B calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced;		8.7.A calculate and analyze how the acceleration of an object is dependent upon the net force acting on the object and the mass of the object using Newton Second Law of Motio	's			Phy.5.E explain and apply the concepts of equilibrium and inertia as represented by Newton's first law of motion using relevant real world examples such as rockets, satellites, and automobile exa _0 1 Tf()T	rj			

	l I I	l I	I		1 1	ĺ	Phy.8.F investigate the	ı	I	I	ĺ
							emission spectra produced by various atoms and				
							explain the relationship to the electromagnetic				
							spectrum; Phy. 9.A describe the				
							photoelectric effect and emission spectra produced				
							by various atoms and how				
	2.8.A demonstrate						both are explained by the photon model for light;				
	and explain that sound is made by vibrating matter and that vibrations cabo										
	vibrating matter and	N. 0 4.	19Td (vibrating)Tj /Tl_0 1 Tf ()Tj /TT0 1w	20 10 24 0 24 077	CA A TIC ()TI' (TITO A TIA(C)	T' T					
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Sound											
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Electricity		4.8.C demonstrate and describe how electrical describe how electrical denergy travels in a closed path that can produce light and thermal energy.	5.8B demonstrate that electrical energy in complete circuits can be transformed into mot@003#567@00	0034858.6					

Quantum Physics								Phy. 9.D give examples of applications of quantum phenomena, including the Heisenberg uncertainty principle, quantum computing, and cybersecurity.		
Conservation of Charge								Phy. 6.C investigate and describe conservation of charge during the processes of induction, conduction, and polarization using different materials such as electroscopes, balloons, rods, fur, silk, and Van de Graaf generators;		
Key	SE containing blue text aligns with more that	n one topic. The black text	t is relevant to the topic in	n that row.	·					
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