

Middle School

Level of Study	Prior Science TEKS	TEKS Implemented in 2024
Grade 6	<p>-----</p> <p>8.6.A demonstrate and calculate how unbalanced forces change the speed or direction of an object's motion;</p> <p>-----</p>	<p>6.7.A identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real- world applications;</p> <p>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;</p> <p>6.7.C identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion.</p>
	<p>-----</p> <p>6.11.B understand that gravity</p>	

High School

Level of Study	Prior Science TEKS	TEKS Implemented in 2024
<p>Integrated Physics and Chemistry (IPC)</p>	<p>IPC.4.D describe and calculate the relationship between force, mass, and acceleration using equipment such as dynamic carts, moving toys, vehicles, and falling objects;</p> <p>IPC.4.G examine electrical force as a universal force between any two charged objects</p>	<p>IPC.5.B analyze data to explain the relationship between mass and acceleration in terms of the net force on an object in one dimension using force diagrams, tables, and graphs;</p> <p>IPC.5.D describe the nature of the four fundamental forces: gravitation; electromagnetic; the strong and weak nuclear forces, including fission and fusion; and mass-energy equivalency;</p>
	<p>Phy.4.D calculate the effect of forces on objects, including the law of inertia, the relationship between force and acceleration, and the nature of force pairs between objects using methods, including free-body force diagrams.</p> <p>Phy.5.C describe and calculate how the magnitude of the mag</p>	

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