

CURRICULUM MAP FOR SCIENCE PHYSICS

(Suggested timeline for introducing content and process standards - some overlap all four quarters)

SCIENCE GSEs	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
1. Life Science				
2. Earth and Space Science		<ul style="list-style-type: none"> • Kepler 2.5.1-2.5.3 • Gravitation 2.5.2, 2.6.3 2.9.1 • Changes in the understanding the structure of the universe 2.6.1-2.6.2 <p style="color: red; margin-top: 10px;">Experiment/Activity</p> <ul style="list-style-type: none"> • Plotting the Orbit of Mars 2.5.5 <p style="color: red; margin-top: 10px;">Open Response</p> <ul style="list-style-type: none"> • Changing in Space Probe Velocity 2.5.6 <p style="color: red; margin-top: 10px;">Assessment Target 2.5, 2.6</p>	<ul style="list-style-type: none"> • Doppler shift 2.7.1-2.7.2 • Waves 2.8.1-2.8.2 <p style="color: red; margin-top: 10px;">Experiment/Activity</p> <p style="color: red; margin-top: 10px;">Open Response</p> <ul style="list-style-type: none"> • "Big Bang" 2.7.5 <p style="color: red; margin-top: 10px;">Assessment Target 2.7, 2.8</p>	
3. Physical Science	<ul style="list-style-type: none"> • Distance/displacement 3.8.1 • Vectors 3.8.2- 3.8.3 • Accelerated Motion 3.8.5-3.8.9 • Projectiles 3.8.10-3.8.11 • Reference Frame 3.8.4 • Newton's Law 3.9.1-3.9.8, 3.9.16 	<ul style="list-style-type: none"> • Work 3.5.2, 3.9.9 • Energy, 3.5.1, 3.5.3 • Laws of Conservation of Energy 3.5.4, 3.5.7, 3.5.9 • Efficiency 3.5.5, 3.5.6, 3.5.8 • Impulse/momentum 3.9.12-3.9.13 • Collisions 3.9.14 • Centripetal Motion 3.8.12-3.8.14 • Torque and static's problem 3.9.10-3.9.11 • Angular momentum 3.9.15 • Mechanical waves 3.10.1-3.10.8 	<ul style="list-style-type: none"> • Sound 3.10.9-3.10.18 • Light 3.10.19 -3.10.21, 3.10.25, 3.10.34 • Color 3.10.24 • Mirrors 3.10.22, 3.10.32, 3.10.33 • Refraction 3.10.26- 3.10.28 • Lens 3.10.30-3.10.33 • Eye problems 3.10.35 • Interference 3.10.29, 3.10.36, 3.10.37 • Electrostatics 3.7.1-3.7.8 	<ul style="list-style-type: none"> • Electrical current 3.7.9-3.9.11 • DC circuits 3.7.11-3.7.19 • Magnetism 3.7.20-3.7.23 • Induction 3.7.24-3.7.28 • AC current 3.7.29-3.7.30

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	<p>Experiments/Activities</p> <ul style="list-style-type: none"> • Investigating Freefall Lab 3.8.16 • Walking Speed Lab Lab 3.8.16 • Graphing Speed Lab Lab 3.8.16 • Distance vs. Displacement Activity Lab 3.8.16 • Acceleration Down and Incline Lab Lab 3.8.16 • Rocket Trajectories Lab 3.8.16 • Building Projectile Launchers Lab 3.8.16 • Accelerated Cart Lab Lab 3.9.18 • Friction Down an Incline Lab 3.9.18 • Newton's First Law Lab 3.9.18 <p>Open Response 3.8.17</p> <ul style="list-style-type: none"> • Amusement Park • Motion of a Car • Movement over Time • Force vs. Acceleration <p>Assessment Target 3.8</p>	<p>Experiment/Activities</p> <ul style="list-style-type: none"> • Roller Coaster Activity 3.5.11 • Efficiency of a Bouncing Ball 3.5.11 • Conservation of Energy of a Projectile 3.5.11 • Centripetal Motion of a Rubber Stopper 3.8.16 • Elastic and Inelastic Collision Lab 3.9.18 • Pasco Measuring Impulse Lab 3.9.18 • Fan Cart Impulse Lab 3.9.18 • Conceptual Physics Car Dart Lab 3.9.18 • Investigating Standing and Traveling Waves on Springs Lab 3.10.38 <p>Open Response 3.5.12</p> <ul style="list-style-type: none"> • Air Track 3.9.19 <p>Assessment Target 3.5, 3.9</p>	<p>Experiment/Activities</p> <ul style="list-style-type: none"> • Electrostatic Observation Lab 3.7.32 • Measuring the Speed of Sound Using Resonance Lab 3.10.38 • Spherical Mirrors Lab 3.10.38 • Refraction of Light Lab 3.10.38 • CD Diffraction of Light Lab 3.10.38 • Formation of Images Using Lenses Lab 3.10.38 • Demonstration of Colors and Shadows 3.10.38 <p>Open Response</p> <ul style="list-style-type: none"> • Electric Charge in a Parallel Plate Capacitor 3.7.33 • Musical instrument 3.10.39 • Electromagnetic Spectrum 3.10.39 <p>Assessment Target 3.10</p>	<p>Experiment/Activities 3.7.32</p> <ul style="list-style-type: none"> • Lemon Battery Lab • Series and Parallel Resistor Lab • Resistivity of a Coil Lab • LED Lab • Tangential Galvanometer Lab • Construction of Electric Motors <p>Open Response</p> <ul style="list-style-type: none"> • Analyzing Circuits Around the Home 3.7.33 <p>Assessment Target 3.7</p>

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4. Inquiry	<p>Inquiry Method</p> <ul style="list-style-type: none"> • Collects data • Communicates understanding & ideas • Designs, conducts, & critiques investigations • Represents, analyzes, & interprets data • Experimental design • Observes • Predicts • Questions and hypothesizes • Uses evidence to draw conclusions • Uses tools, & techniques <p>Open Response</p> <p>Assessment Target</p>	<p>Inquiry Method</p> <ul style="list-style-type: none"> • Collects data • Communicates understanding & ideas • Designs, conducts, & critiques investigations • Represents, analyzes, & interprets data • Experimental design • Observes • Predicts • Questions and hypothesizes • Uses evidence to draw conclusions • Uses tools, & techniques <p>Open Response</p> <p>Assessment Target</p>	<p>Inquiry Method</p> <ul style="list-style-type: none"> • Collects data • Communicates understanding & ideas • Designs, conducts, & critiques investigations • Represents, analyzes, & interprets data • Experimental design • Observes • Predicts • Questions and hypothesizes • Uses evidence to draw conclusions • Uses tools, & techniques <p>Open Response</p> <p>Assessment Target</p>	<p>Inquiry Method</p> <ul style="list-style-type: none"> • Collects data • Communicates understanding & ideas • Designs, conducts, & critiques investigations • Represents, analyzes, & interprets data • Experimental design • Observes • Predicts • Questions and hypothesizes • Uses evidence to draw conclusions • Uses tools, & techniques <p>Open Response</p> <p>Assessment Target</p>