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| Time Frame | Topic/Unit | Skills/Concepts | Major Assessments | Core Standards | Resources |
| 1 week | Review of Math Skills | * SI Prefixes * Conversions * Apply Scientific Notation and Significant Figure Rules |  | M1.1, S3.1, 3.2 M2.1, 5.1a, | Lab – Using Venire Calipers |
| 1 week | Measurement | * Tools in Measurement * Evaluating Experimental Results * Graphing Data |  | M1.1, S3.1, 3.2 M2.1, 5.1a, | Lab – Measuring Height Indirectly |
| 2 weeks | Velocity and Acceleration | * Scalar vs Vector Quantities Determination * Solving Equations Using Algebra |  | 5.1d | Lab – Graphical Analysis of Motion |
| 2 weeks | Newton’s Laws Forces/Friction | * Dynamics of using Newton’s 3 Laws of Motion * Friction and Static Forces |  | 5.1e, I, k,q,Std 6-4.2 | Lab – Forces of Friction |
| 2 weeks | Vector Addition | * Kinematics * Free Fall * Gravity * Acceleration |  | 5.1d, 5.1b, 5.1c, 5.1j, 4.1h, 5.1o | Lab – Addition of Force Vectors |
| 2 weeks | Motion in Two Dimensions | * Trajectories Fired Horizontally and at an Angle |  | 5.1b,c,f,g,h | Lab – Path of a Projectile |
| 2 weeks | Gravity | * Graphs with Gravity * Distance/Displacement * Speed/Velocity |  | 5.1d | Lab – Velocity of a Rocket  Lab – Inclined Plane |
| 1 week | Circular Motion | * Problems with Circular Motion * Pendulum |  | 5.1n, 4.1a, 4.1c, 4.1d, 4.1e | Lab – Centripetal Force  Lab – Pendulum |
| 2 weeks | Momentum | * Law of Conservation of Motion |  | 5.1p, 5.1r | Lab – Momentum  Video on Car Crashes |
| 2 weeks | Work/Power | * Energy and it’s Forms * Work, Power, and Energy Problems |  | 4.1g,h,j,5.3f,j, | Lab – Spring Constant  Lab – Pulleys |
| 3 weeks | Energy | * Potential and Kinetic Energy * Elastic Energy * Hooke’s Law * Energy Conservation |  | 4.1c,5.1m,4.1a-f,j | Lab – Mechanical Energy |
| 3 weeks | Waves | * Types of Waves and Wave Behavior * Wave Characteristics, Pulses, and Periodic Waves |  | 4.3a,b,c,h | Lab – Wave Properties, Law of Reflection |
| 3 weeks | Sound | * Wave Phenomena * Doppler Effect * Interference * Resonance * Diffraction |  | 4.3d,e,f,m,n,h,I,j, | Lab – Speed of Sound in Air  Lab – Pitch |
| 3 weeks | Light | * Speed of Light * Reflection * Refraction * Absolute Index of Refraction * Snell’s Law |  | 4.3l, I, j, h, k, 4.1b, k, 4.3g,k | Lab – Snell’s Law  Lab – Polarization |
| 1 week | Static Electricity | * Electrostatics * Transfer of Charge * Law of Conservation of Charge * Coulomb’s Law * Field Strength |  | 5.1t, 5.3b, 5.3f, 5.1s, 5.1u | Lab – Static Electricity |
| 2 weeks | Electrical Circuits | * Electric Current * Ohm’s Law * Resistivity * Series and Parallel Circuits * Electric Power and Energy |  | 4.1l, 4.1n, 4.1a, b, j, l, m, n, o, p | Lab – Ohm’s Law |
| 1 week | Magnetism | * Magnetic Fields * Flux * Lines and Strength * Electromagnetic Induction * Radiation |  | 5.1t,4.1k | Lab – Magnetic Field Lines |
| 3 weeks | Modern Physics | * Wave-Particle * Duality of Energy and Matter * Quantum Theory * Photon-Particle Collisions |  | 4.3a-f,4.3h-n | Lab – Geiger Counter |
| 3 weeks | Review for Regents Exam | * Models of the Atom * Nuclear Force * The Standard Model of Particle Physics |  | 4.1b,k,g, | Lab – Rockets  Lab – Amusement Park Physics |