Standard ID	Standard Text	Edgenuity Lesson Name
HS-PS1.	Matter and Its Interactions	
	Students who demonstrate understanding can:	
HS-PS1-1.	Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.	Elements Periodic Table Metals Nonmetals Metalloids Chemical Bonding Ionic Bonds Covalent Bonds Lab: Ionic and Covalent Bonds
HS-PS1-3.	Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles.	Physical Properties Density Lab: Density of Solids States of Matter Chemical Properties Chemical Bonding Ionic Bonds Covalent Bonds Lab: Ionic and Covalent Bonds Polymers Properties of Acids and Bases Acids and Bases in Solution Lab: Acids and Bases

Standard ID	Standard Text	Edgenuity Lesson Name
HS-PS2.	Motion and Stability: Forces and Interactions	
	Students who demonstrate understanding can:	
HS-PS2-1.	Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	Speed and Velocity Acceleration Lab: Motion with Constant Acceleration Fundamental Forces Newton's First and Third Laws Newton's Second Law Lab: Newton's Second Law Centripetal Acceleration Circular Motion Orbital Motion
HS-PS2-2.	Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.	Impulse and Momentum Conservation of Momentum Lab: Conservation of Linear Momentum
HS-PS2-3.	Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.	Impulse and Momentum Conservation of Momentum Lab: Conservation of Linear Momentum Projectile Motion
HS-PS2-4.	Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects.	Fundamental Forces Universal Law of Gravitation Coulomb's Law
HS-PS2-5.	Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.	Electromagnetic Waves Electric Fields Magnetic Field and Force Electromagnetic Induction Lab: Electromagnetic Induction Applications of Electromagnetic Induction
HS-PS2-6.	Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.	States of Matter Nanotechnology Solid State Physics

Standard ID	Standard Text	Edgenuity Lesson Name
HS-PS3.	Energy	
	Students who demonstrate understanding can:	
HS-PS3-1.	Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.	Introduction to Energy Potential and Kinetic Energy Lab: Kinetic Energy Energy Transformations Heat Radiation Lab: Thermal Energy Transfer Sound Waves
HS-PS3-2.	Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as either motions of particles or energy stored in fields.	Introduction to Energy Potential and Kinetic Energy Lab: Kinetic Energy Energy Transformations Temperature and Thermal Energy Heat Conduction Convection Radiation Wave Interactions Sound Waves
HS-PS3-3.	Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	Introduction to Energy Energy Transformations Lab: Magnetic and Electric Fields Electromagnetism
HS-PS3-4.	Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).	Changes of State Temperature and Thermal Energy Heat Conduction Convection Radiation Lab: Thermal Energy Transfer
HS-PS3-5.	Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.	Electric Charge Lab: Magnetic and Electric Fields Electromagnetism

Standard ID	Standard Text	Edgenuity Lesson Name
HS-PS4.	Waves and their Applications in Technologies for Information Transfer	
	Students who demonstrate understanding can:	
HS-PS4-1.	Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.	Properties of Waves Sound Waves Properties of Light Refraction and Lenses
HS-PS4-2.	Evaluate questions about the advantages of using a digital transmission and storage of information.	Using Sound
HS-PS4-3.	Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.	Properties of Waves Properties of Light Reflection and Mirrors
HS-PS4-4.	Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.	Wave Interactions Properties of Light Radiation
HS-PS4-5.	Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.	Using Sound The Electromagnetic Spectrum Using Light
HS-ETS1.	Engineering and Design	
	Students who demonstrate understanding can:	
HS-ETS1-1.	Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.	Nonrenewable Resources Renewable Resources Using Light
HS-ETS1-2.	Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.	Radiation Types of Chemical Reactions Technological Design Momentum

Standard ID	Standard Text	Edgenuity Lesson Name
HS-ETS1-3.	Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.	Types of Chemical Reactions Technological Design Momentum Nonrenewable Resources Renewable Resources Radiation
HS-ETS1-4.	Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.	