

TYPE	SUBJECT	UNIT	LESSON
Activity	Physics and Chemistry	Noncontact Forces	Explain 2 <b>Explain 2: Gravitational Forces</b> - Between the Earth and the Moon - Forces and Distances - Meteorite - Satellite Orbit - Mass, Weight and Gravity - On Another Planet - Curiosity Mars Rover - Gravity on each Planet - Gravity in Height - Mars' Natural Satellites - The Satellite Europa
			Explain 3 <b>Explain 3: Electric Forces</b> - What Force Is Acting? - How Far Apart? - Equal Charges - System of Charges I - System of Charges II
Activity	Physics and Chemistry	Forces (II)	Explain 2 <b>Explain 2: Measuring, Representing and Combining Forces</b> - A Dynamometer Without a Scale - Elasticity Constant - Composition of Forces in the Same Direction - What Forces Make It Up? - Composition of Forces in Different Directions (I) - Composition of Forces in Different Directions (II) - Tug-of-War - Composition of Forces - What Is the Other Force? - Pushing a Piece Of Furniture
			Explain 3 <b>Explain 3: Contact and Action-at-a-Distance Forces</b> - The Wooden Blocks - A Box on a Ramp - Bus Wheels - The Bronze Bell
			Explain 4 <b>Explain 4: Forces and Motion</b> - Weight on the Moon - Accelerating Object - Ice Hockey
Activity	Physics and Chemistry	Quantitative Chemistry	Explain 1 <b>Explain 1: The Mole</b> - How Many Atoms Are There? (I) - How Many Atoms Are There? (II) - What Is the Mass Of the Sample? (I) - What Is the Mass Of the Sample? (II)
			Explain 3 <b>Explain 3: Concentration Of a Solution</b> - Hand Sanitizer - Recommended Calcium Intake - Soft Drinks - What Is its Molarity? (I) - What Is its Molarity? (II) - How Many Grams Does It Contain? - From Molarity to Mass Concentration I - From Molarity to Mass Concentration II
			Explain 5 <b>Explain 5: Chemical Reaction Model</b> - Classification Of Reactions
			Explain 6 <b>Explain 6: Introduction to Stoichiometry</b> - Silver Nitrate - Methanol Combustion - Iron and Hydrochloric Acid
			Explain 7 <b>Explain 7: Calculations in Chemical Reactions</b> - Acid-base Reaction (I) - Acid-base Reaction (II) - Titration of a Solution - Energy in an Exothermic Reaction - Energy in an Endothermic Reaction
Activity	Physics and Chemistry	Atoms and Bonds	Explain 2 <b>Explain 2: Electronic Configuration of Atoms</b> - Atomic Number, Charge and Number of Electrons - Electron Configurations - Electrons and Configuration - Chemical Families and Electronic Configuration - Based on Electronic Configuration I - Based on Electronic Configuration II
			Explain 3 <b>Explain 3: Electrons in Chemical Bonding</b> - Ionic Substances I - Ionic Substances II - Ions and Electronic Configuration - Valence Electrons in Metals - Other Covalent Bonds
Activity	Physics and Chemistry	Acceleration	<b>Explain 1: Uniform and Nonuniform Motion</b> - The Tsuraru Strait - Track and Field Records - Car Trip - Bus Route - Airplane Autopilot - The Speed of Light - Two Cyclists - Delivery Route
Activity	Physics and Chemistry	Acceleration	<b>Explain 2: Speed in Graphs</b> - Fast Animals - High-speed Train - Motion Graph - A Brief Motion - A Moving Train
Activity	Physics and Chemistry	Acceleration	<b>Explain 3: Changes in Speed and Acceleration</b> - Speeding Downhill - Marble and Ramp - On a Train - Connecting Accelerations - Exiting the Highway - The Traffic Light - Speed-time Graphs