

Third Grade
PA Academic Standards at the Lancaster Science Factory Exhibits
Physics and Chemistry

Under standard category Physical Sciences: Chemistry and Physics (3.2.)

[X] = This exhibit essentially fulfills the standard statement, however the exhibit may require additional explanation from the teacher.

Topic	Exhibit	The Strands					
		Physics 1. Force & Motion of Particles and Rigid Bodies	Physics 2. Energy Storage and Transformations: Conservation Laws	Physics 4. Electrical and Magnetic Energy	Physics 5. Nature of Waves (Sound and Light Energy)	Chemistry 1. Properties of Matter	Chemistry 5. Unifying Themes
Acoustics	Physics of Sound: Bongophone		[X]				
	Physics of Sound: Drumbone		[X]				
	Whisper Dishes		[X]				
	Whisper Tubes		[X]				
Energy and Magnetism	Crank Power		X				
	Electrical Circuit		X	X			
	Electrical Conductors & Insulators		[X]	X			
	Light It Up		X	X			
	Magnetic Field Visualization: At the Poles			X			
	Magnetic Field Visualization: Liquid Spikes			X			
	Magnetic Field Visualization: Seeing Magnetic Fields			X			
	Magnetic Sculpture			X			[X]
Rockin' Radiation		X					
Fluid Dynamics	Airplay	X					
	Flight Deck	X					
	Tennis Ball Launcher	X	X				
	Minimal Surfaces				[X]		
	Parachute Launcher	X					
	Water Table: Hero's Fountain	X	[X]				
Water Table: Water Tornado	X	[X]					
Light and Color	Kaleidoscope				[X]		
	Light Room: Color Change-Up		[X]				
	Light Room: Colored Shadows		[X]				
	Light Room: Lenses, Mirrors and Filters		[X]		X		
Mechanics and Motion	Gear Power	X				[X]	
	Gravity Racer	X					
	Gravity Well	X					
	Kinetic Energy Machine	X	X				
	Leverage Learning	X					
	Newton's Cradle	X	X				
	Pendulum Booth: Compare Amplitude/Mass/Length	X					
	Pendulum Booth: Magnetic Pendulum	X		X			
	Pendulum Booth: Pegboard Pendulum	X					
	Pendulum Booth: Pendulum Snake	X					
	Pendulum Booth: Sand Pendulums	X					
	Race Track Table: Galileo Track	X	X				
	Race Track Table: High Road - Hilly Road	X	X				
	Race Track Table: High Road - Low Road	X	X				
	Race Track Table: Identical Tracks	X	X				
Roller Coaster	X	X					
Super Bounce	X	X					
Puzzles and Brain Teasers	Cyclograph	[X]			[X]		
	Geometric Shapes			[X]		[X]	
	Hyperbolic Slot	[X]					
	K'NEX Building Zone					[X]	
	K'NEX Mini-Racers	X	[X]			[X]	
	Puzzle Table A: Circle Packing					[X]	
	Puzzle Table A: Tangram					[X]	
	Puzzle Table B: Color Match					[X]	
	Puzzle Table C: Trapezoids 2 Triangle					[X]	
	Puzzle Table C: Pyramid Puzzler					[X]	
Puzzle Table C: Tower of Hanoi					[X]		
Backup Puzzle: Box of Many Holes					[X]		
Structural Engineering	Earthquake	[X]	[X]				