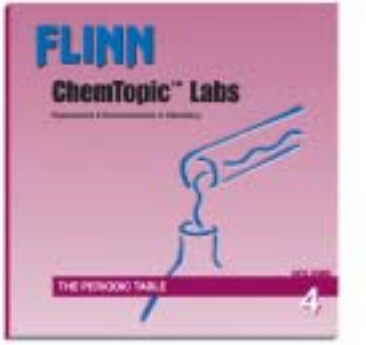
The Periodic Table—
National Science Education Standards



Experiments and Demonstrations

	It's in the Cards	Density Is a Periodic Property	Periodic Trends and Properites of Elements	All in the Family	Periodic Activity of Metals	Safe Swimming with Sodium	Plotting Trends	Ultimate Element Crossword Puzzle	Solubility Patterns
Unifying Concepts and Processes									
Systems, order, and organization	✓	✓	✓				✓		
Evidence, models, and explanation	✓	✓	✓	✓	✓		✓		✓
Constancy, change, and measurement		✓					✓		
Evolution and equilibrium									
Form and function									
Science as Inquiry									
Identify questions and concepts that guide scientific investigation	✓	✓	✓	✓	✓				
Design and conduct scientific investigations		✓	✓	✓	✓				✓
Use technology and mathematics to improve scientific investigations		✓					✓		
Formulate and revise scientific explanations and models using logic and evidence	✓		✓	✓	✓		✓		✓
Recognize and analyze alternative explanations and models	✓						✓		
Communicate and defend a scientific argument							✓		
Understanding scientific inquiry	✓								
Physical Science									
Structure of atoms									
Structure and properties of matter	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chemical reactions			✓	✓	✓	✓		✓	
Motions and forces									
Conservation of energy and the increase in disorder									
Interactions of energy and matter									

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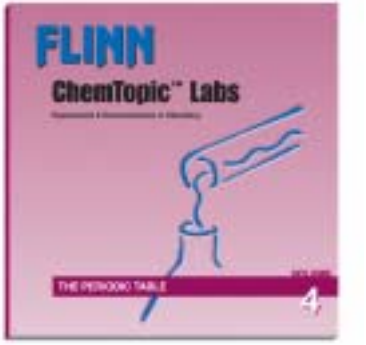

Experiments and Demonstrations

Content Standards *(continued)*

	It's in the Cards	Density Is a Periodic Property	Periodic Trends and Properties of Elements	All in the Family	Periodic Activity of Metals	Safe Swimming with Sodium	Plotting Trends	Ultimate Element Crossword Puzzle	Solubility Patterns
Science and Technology									
Identify a problem or design an opportunity							✓		
Propose designs and choose between alternative solutions									
Implement a proposed solution									
Evaluate the solution and its consequences									
Communicate the problem, process, and solution							✓		
Understand science and technology									
Science in Personal and Social Perspectives									
Personal and community health									
Population growth									
Natural resources									
Environmental quality									
Natural and human-induced hazards									
Science and technology in local, national, and global challenges									
History and Nature of Science									
Science as a human endeavor	✓	✓						✓	
Nature of scientific knowledge	✓	✓					✓		
Historical perspectives	✓	✓						✓	