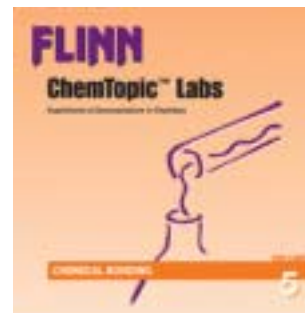


Chemical Bonding— National Science Education Standards



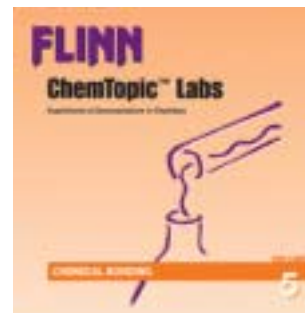
Experiments and Demonstrations

Content Standards

	Properties of Solids	Formula of an Ionic Compound	Lewis Structures and Molecular Geometry	The Color of Chemistry	Go Fish for an Ion	Electronegativity	Splatter Test	Graphite Disk Demonstration	Properties of Metals	Super Dipper Polymer
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										
Understand 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									✓	

Continued on next page

Chemical Bonding— National Science Education Standards



Experiments and Demonstrations

Content Standards *(continued)*

Properties of Solids
Formula of an Ionic Compound
Lewis Structures and Molecular Geometry
The Color of Chemistry
Go Fish for an Ion
Electronegativity
Splatzer Test
Graphite Disk Demonstration
Properties of Metals
Super Dupper Polymer

Science and Technology	Properties of Solids	Formula of an Ionic Compound	Lewis Structures and Molecular Geometry	The Color of Chemistry	Go Fish for an Ion	Electronegativity	Splatzer Test	Graphite Disk Demonstration	Properties of Metals	Super Dupper Polymer
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				✓						