

ACTIVE CHEMISTRY AND THE NATIONAL SCIENCE EDUCATION STANDARDS

Active Chemistry Chapter	Movie Special Effects	The Periodic Table	Cool Chemistry Show
Physical Science			
Structure of Atoms	•	•	•
Structure and Properties of matter	•	•	•
Chemical reactions	•	•	•
Motions and forces		•	
Conservation of energy and increase in disorder	•	•	•
Interactions of energy and matter	•	•	
Unifying Concepts and Processes			
Systems, order and organization	•	•	•
Evidence, models and explanations		•	
Constancy, change and measurement	•	•	•
Evolution and equilibrium	•		•
Form and function			
Science as Inquiry			
Identify questions and concepts that guide scientific investigations	•	•	•
Design and conduct scientific investigations	•	•	•
Use technology and mathematics to improve investigations	•	•	•
Formulate and revise scientific explanations and models using logic and evidence	•	•	•
Communicate and defend a scientific argument	•	•	•
Understand scientific inquiry	•	•	•
Science and Technology			
Identify a problem or design an opportunity	•	•	•
Propose designs and choose between alternate solutions	•		
Implement a proposed solution	•		
Evaluate the solutions and their 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	•	•	