

ACTIVE BIOLOGY AND THE NATIONAL SCIENCE EDUCATION STANDARDS

Active Biology Chapter	A Vote for Ecology	A Highway Through the Past
Life Science		
The cell		
Molecular basis of heredity		
Biological evolution		•
Interdependence of organisms	•	•
Matter, energy, and organization in living systems	•	
Behavior of organisms	•	•
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	•	•