

K-12 NATIONAL SCIENCE EDUCATION STANDARDS

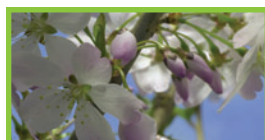


EDUCATOR'S GUIDE

CONTENT TOPIC AREAS



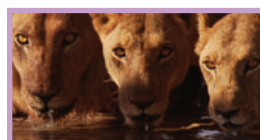
Science as Inquiry



Life Sciences



Earth and Space Science
















Science in Personal and Social Perspectives



History and Nature of Science















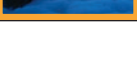
THE EARTH AND THE SUN

NATIONAL SCIENCE EDUCATION STANDARDS		TASK NUMBER BY GRADE		
Topic Area	Develop Understanding Of:	Grades K-2 (Pg. 17)	Grades 3-6 (Pg. 18)	Grades 7-12 (Pg. 19)
	Understandings about scientific inquiry	Tasks 5 & 6	Tasks 1-3 & 5-8	Tasks 1-3
	Abilities necessary to do scientific inquiry	Task 5	Tasks 1-3 & 5-8	Tasks 1-3
	Organisms and environments	Tasks 6 & 7		
	Objects in the sky	Tasks 1-5		
	Changes in earth and sky	Tasks 1-5		
	Structure of the earth system		Tasks 1-8	
	Earth in the solar system		Tasks 1-8	
	Energy in the earth system			Tasks 1-3
	Characteristics and changes in populations	Tasks 6 & 7		
	Science and technology in society		Task 6	
	Environmental quality			Tasks 3-5
	Natural and human-induced hazards			Tasks 3-5
	Nature of scientific knowledge			Tasks 1-3














THE GREAT MIGRATIONS

NATIONAL SCIENCE EDUCATION STANDARDS		TASK NUMBER BY GRADE		
Topic Area	Develop Understanding Of:	Grades K-2 (Pg. 26)	Grades 3-6 (Pg. 26)	Grades 7-12 (Pg. 27)
	Understandings about scientific inquiry	Tasks 2 & 3	Tasks 1-3	Tasks 1-4
	Abilities necessary to do scientific inquiry	Task 2 & 3	Tasks 1-3	Tasks 2-4
	Structure and function in living systems		Tasks 1-3	
	Regulation and behavior		Tasks 1-4	
	Populations and ecosystems		Tasks 1-3	
	Diversity and adaptations of organisms		Tasks 1-4	
	Interdependence of organisms			Tasks 1-4
	Matter, energy, and organization in living systems			Tasks 1-4
	Behavior of organisms			Tasks 1-4
	Changes in earth and sky	Tasks 1-3		
	Characteristics and changes in populations	Task 3		
	Changes in environment	Task 3		
	Populations, resources, and environments		Task 3	
	Natural hazards		Task 3	
	Risks and benefits		Task 3	
	Natural and human-induced hazards			Task 3
	Nature of scientific knowledge			Tasks 2 & 3
















ADAPTATION AND HABITAT

NATIONAL SCIENCE EDUCATION STANDARDS		TASK NUMBER BY GRADE		
Topic Area	Develop Understanding Of:	Grades K-2 (Pg.35)	Grades 3-6 (Pg.36)	Grades 7-12 (Pg.37)
	Understandings about scientific inquiry	Tasks 1-3	Tasks 1-3 & 7-8	Tasks 1 & 2
	Abilities necessary to do scientific inquiry	Tasks 1-3	Tasks 1-3 & 7-8	Tasks 1 & 2
	Characteristics of organisms	Tasks 1-3		
	Organisms and environments	Tasks 1-3		
	Structure and function in living systems		Tasks 1-5 & 7-8	
	Regulation and behavior		Tasks 1-5 & 7-8	
	Populations and ecosystems		Tasks 1-7	
	Diversity and adaptations of organisms		Tasks 1-8	
	Interdependence of organisms			Tasks 1 & 2
	Matter, energy, and organization in living systems			Tasks 1 & 2
	Behavior of organisms			Tasks 1 & 2
	Changes in environment	Task 3		
	Natural and human-induced hazards			Tasks 1 & 2
	Environmental quality			Tasks 1 & 2
	Nature of scientific knowledge		Tasks 7 & 8	

PREDATOR AND PREY

NATIONAL SCIENCE EDUCATION STANDARDS		TASK NUMBER BY GRADE		
Topic Area	Develop Understanding Of:	Grades K-2 (Pg. 44)	Grades 3-6 (Pg. 44)	Grades 7-12 (Pg. 45)
	Understandings about scientific inquiry	Tasks 1 & 2	Tasks 1 & 3	Task 3 & 5-6
	Abilities necessary to do scientific inquiry	Task 2	Task 1	Task 3 & 5-6
	Characteristics of organisms	Tasks 1 & 2		
	Organisms and environments	Task 2		
	Structure and function in living systems		Tasks 1-4	
	Regulation and behavior		Tasks 1-4	
	Populations and ecosystems		Tasks 1-4	
	Diversity and adaptations of organisms		Task 3	
	Interdependence of organisms			Tasks 1-6
	Matter, energy, and organization in living systems			Tasks 1-6
	Behavior of organisms			Tasks 1-6
	Natural and human-induced hazards			Task 6
	Environmental quality			Task 6

LIFE CYCLES

NATIONAL SCIENCE EDUCATION STANDARDS		TASK NUMBER BY GRADE		
Topic Area	Develop Understanding Of:	Grades K-2 (Pg. 53)	Grades 3-6 (Pg. 54)	Grades 7-12 (Pg. 55)
	Understandings about scientific inquiry	Tasks 2-3 & 6-7	Tasks 2-5	Task 1 & 3-4
	Abilities necessary to do scientific inquiry	Tasks 2-3 & 6-7	Tasks 2-5	Task 1 & 3-4
	Characteristics of organisms	Tasks 1-7		
	Life cycles of organisms	Tasks 2-3 & 5-7		
	Organisms and environments	Tasks 1-5		
	Structure and function in living systems		Tasks 1-6	
	Reproduction and heredity		Tasks 1-6	
	Regulation and behavior		Tasks 1-5	
	Populations and ecosystems		Task 2	
	Diversity and adaptations of organisms		Task 1	
	Biological evolution			Task 1
	Interdependence of organisms			Tasks 1-4
	Behavior of organisms			Tasks 1-4
	Natural and human-induced hazards			Tasks 1-4
	Environmental quality			Tasks 3 & 4