National Science Education Standards Chart

STANDARDS	What is El Niño?	Thar She Blows	Clues from the Past	Weird and Wacky World-Wide Weather	Science behind the Story	Tracking El Niño	Is El Niño Coming?	Hold the Anchovies
STANDARD A – SCIENCE AS INQUIRY								
Science as Inquiry (Grades 5-8, 9-12) Use the scientific method to identify problems and test hypothesis to draw appropriate conclusions	☑	☑	☑	☑	☑	☑	☑	☑
STANDARD D – EARTH SCIENCE								
Structure of the Earth System (Grades 5-8) Global patterns of atmospheric movement influences local weather with oceans having a major effect on climate		☑		☑		☑	☑	
Energy in the Earth System (Grades 9-12) Hydrologic cycle and specific heat of water	☑	☑		☑		☑	☑	
STANDARD D – LIFE SCIENCE								
Populations and Ecosystems (Grades 5-8) Biodiversity and population density depends on resources available and on abiotic factors		☑	☑	☑		☑	☑	☑
STANDARD E – SCIENCE TECHNOLOGY								
Technological Design (Grades 5-12)				☑	☑		☑	
Understanding about science/technology Identify the problem, design and evaluate communication tools to better solve problems through the use of technology	☑			☑	☑		☑	
STANDARD F – PERSONAL AND SOCIAL PERSPECTIVE								
Populations, resources, environment Use of science to understand environmental quality (Grades 5-12)		☑	☑	☑		☑	☑	
Risks and benefits Identify natural hazards		☑	☑					
Science/technology in society Determine the best use of science and technology to address challenges				☑	☑	☑	☑	☑
HISTORY AND NATURE OF SCIENCE								
Science as a human endeavor (Grades 5-12) Illustrate how data is collected and used		☑	☑	☑	☑	☑	☑	☑
Nature of science	☑	☑		☑			☑	
PHYSICAL SCIENCE								
Properties and changes in properties in matter(Grades 5-8) Use hydrologic cycle and ocean motions to interpret weather patterns and upwellings		☑		☑				
Objects in the sky (Grades 5-12) Interpret data collected through remote sensing equipment to make predictions				☑	☑	☑		

National Geography Education Standards Chart

The goal of the National Geography Standards is to produce a geographically informed person who sees meaning in the arrangement of things in space and applies a spatial perspective to life situations. The geographically informed person knows and understands:

STANDARDS	What is El Niño?	Thar She Blows	Clues from the Past	Weird and Wacky World-wide Weather Effects	Science behind the Story	No Fish No Dinner	Not Again	Winners and Losers
THE WORLD IN SPATIAL TERMS								
Use of maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective	☑	☑		☑	☑	☑	☑	☑
Use of mental maps to organize information about people, places, and environments in a spatial context	☑	☑		☑	☑		☑	☑
Analysis of the spatial organization of people, places, and environments on earth's surface	☑	☑	☑	☑	☑		☑	☑
PLACES AND REGIONS								
The physical and human characteristics of places	☑	☑		☑	☑	☑	☑	
Regions that people create to interpret the earth's complexity	☑	☑	☑	☑	☑	☑	☑	
People's perceptions of places and region are influenced by culture and experience		☑	☑	☑			☑	☑
PHYSICAL SYSTEMS								
The physical processes that shape the patterns of earth's surface	☑	☑	☑	☑	☑		☑	
The characteristics and spatial distribution of ecosystems		☑	☑	☑	☑	☑		
ENVIRONMENT AND SOCIETY								
Human actions modify the physical environment			☑	☑			☑	
Physical systems affect human systems		☑	☑	☑		☑		
The changes that occur in the meaning, use, distribution, and importance of resources		☑	☑			☑	☑	☑
THE USES OF GEOGRAPHY								
The use of geography to interpret the past			☑	☑				☑
The use of geography to interpret the present plan for the future	☑	☑		☑		☑	☑	☑