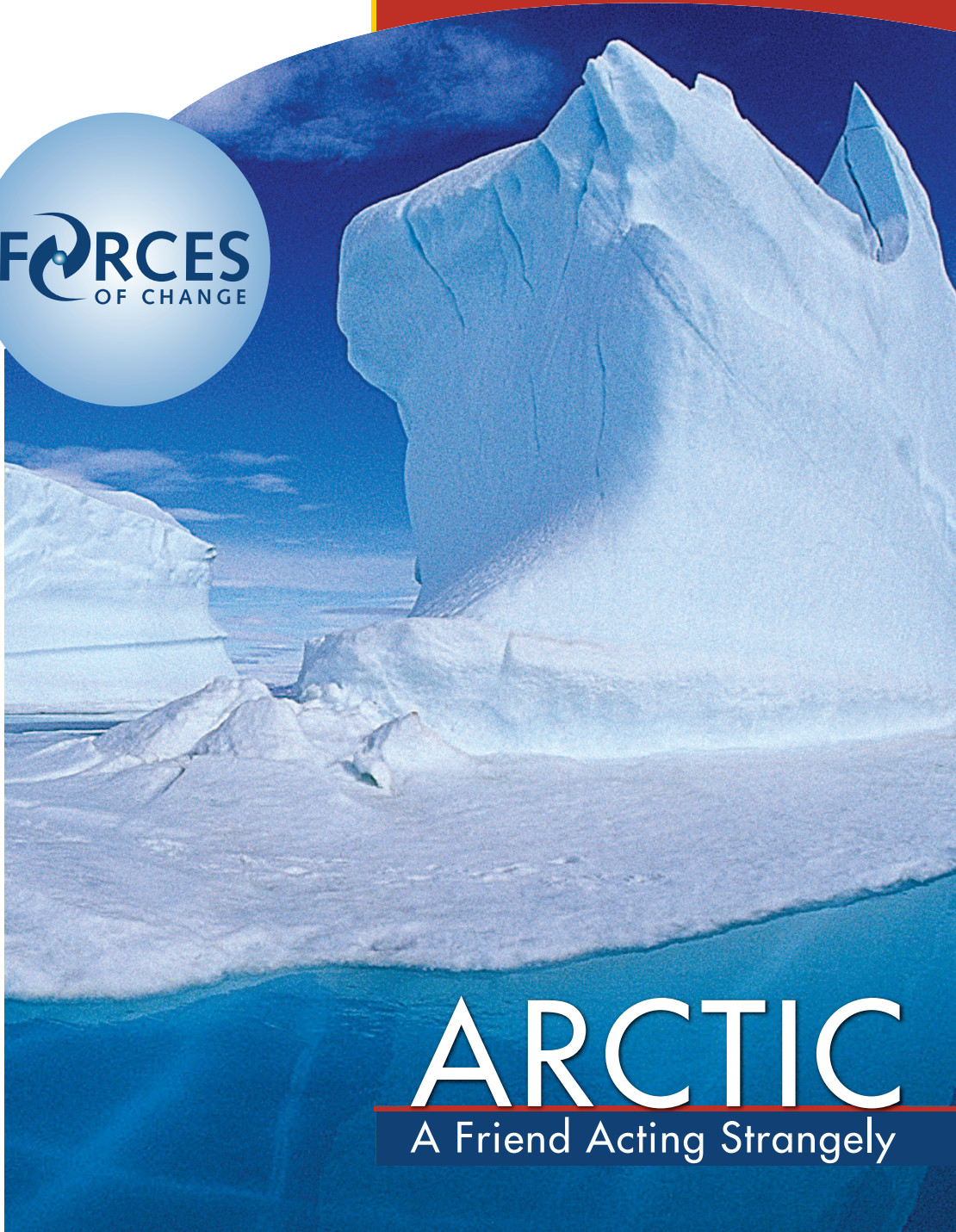


**Educational Activities**  
Introduction & Standards



# ARCTIC

A Friend Acting Strangely



Smithsonian  
*National Museum of Natural History*

## ACTIVITIES

# INTRODUCTION

An elder in Arctic Canada recently described their weather as *uggianaqtuq*—an Inuit word that can suggest strange, unexpected behavior, sometimes described as that of “a friend acting strangely.” People of the Arctic have always lived with year-to-year fluctuations in weather and ice conditions. But in recent decades, they have witnessed dramatic and worrisome changes.

The Smithsonian Institution’s National Museum of Natural History developed the exhibit *Arctic: A Friend Acting Strangely* to explore the forces and consequences of the Arctic’s changing climate. As polar residents and scientists have begun to compare their observations, they have reached the same conclusion: the Arctic is warming—and doing so rapidly. Air temperatures have increased

over most—though not all—of the Arctic since the 1950s. In response, sea ice has steadily decreased, plant distributions and animal migration routes have begun to shift, and coastal erosion has increased—all with implications for Arctic economies and cultures. Many scientists also consider Arctic change to be a possible “bell-weather” for large-scale climate changes in other regions of the world.

These seven educational activities extend the themes and content of the exhibit to middle school students, teachers, and families.

The lesson plans are designed to

be interdisciplinary, interactive, and fun. It is our hope that they inspire you, your families, and your students to use scientific inquiry to learn more about the forces that shape our dynamic planet.



### Arctic Landscape

The Arctic may seem like a far-away place, but it’s closer to home than many realize. The snow and ice that cover much of the Arctic help regulate our global climate.

Photo © L. David Mech

### Our thanks to the following:

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# ACTIVITIES

Content Standards for Grades 5-8  
National Academy of Sciences, 1996

# NATIONAL SCIENCE EDUCATION STANDARDS

	Eyewitnesses to Change	Changes Close to Home	Arctic Heat Wave?	It's a Cool Color	Changes Ahoof?	Ride the Climate Rollercoaster	Weather Words
<b>SCIENTIFIC INQUIRY</b>							
Abilities necessary to do scientific inquiry	X	X	X	X	X	X	X
Understandings about scientific inquiry				X			
<b>PHYSICAL SCIENCE</b>							
Properties and changes of properties in matter				X			
Motions and forces							
Transfer of energy							
<b>LIFE SCIENCE</b>							
Structure and Function in Living Systems							
Reproduction and Heredity							
Regulation and behavior					X	X	
Populations and ecosystems					X	X	
Diversity and adaptations of organisms							
<b>EARTH AND SPACE SCIENCE</b>							
Structure of the earth system	X	X		X		X	
Earth's history	X	X	X			X	
Earth in the solar system							
<b>SCIENCE AND TECHNOLOGY</b>							
Abilities of technological design							
Understandings about science and technology		X	X	X	X	X	
<b>SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES</b>							
Personal Health							
Populations, resources and environments	X	X			X	X	
Natural hazards	X						
Risks and benefits							
Science and technology in society		X					X
<b>HISTORY AND NATURE OF SCIENCE</b>							
Science as a human endeavor	X	X		X	X		
Nature of science	X	X	X	X	X	X	
History of science							