

Michigan State Standards

7th Grade Social Studies

	1	2	3	4	5	6	7	8
	Introduction to Climate Change in East Africa	Changing Temperatures	Changing Water Availability	Changing Vegetation	Changing Land Use	Analyzing Human-Environment Interaction using the Kite Framework	Adapting to Climate Change in the East African Savanna	Convention on Water Use in the Savanna
Environment and Society-Humans and the Environment-7 – G5.1.1 Describe the environmental effects of human action on the atmosphere (air), biosphere (people, animals, and plants), lithosphere (soil), and hydrosphere (water).	X	X		X	X	X		X
Environment and Society-Humans and the Environment-7 – G5.1.2 Describe how variations in technology affect human modifications of the					X	X		X
Environment and Society-Humans and the Environment-7 – G5.1.3 Identify the ways in which human-induced changes in the physical	X	X		X	X	X		X
Environment and Society-Physical and Human Systems-7 – G5.2.1 Describe the effects that a change in the physical environment could have on human activities and the choices people would have to make in adjusting to the change.	X	X	X	X	X	X	X	X
Environment and Society-Physical and Human Systems-7 – G2.2.3 Analyze how culture and experience influence people’s perception of places and						X		X
Physical Processes-7 – G3.1.1 Construct and analyze climate graphs for locations at different latitudes and elevations in the region to answer geographic questions and make predictions based on patterns (e.g., compare and contrast Norway and France; Nairobi and Kilimanjaro; Mumbai and New Delhi).				X				
Ecosystems-7 – G3.2.1 Explain how and why ecosystems differ as a consequence of differences in latitude, elevation, and human activities (e.g., effects of latitude on types of vegetation in Africa, proximity to bodies of water in Europe, and effects of annual river flooding in Southeast Asia and China				X				
Forces of Cooperation and Conflict-7 – G4.4.1 Identify and explain factors that contribute to conflict and cooperation between and among cultural groups (e.g., natural resources, power, culture, wealth).								X
Public Discourse, Decision Making, and Citizen-7 – G6.1.1 Contemporary Investigations – Conduct research on contemporary global topics and issues, compose persuasive essays, and develop a plan for action. (H1.4.3,								X



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Contemporary Global Issues-CG2 Resources Explain the changes over the past 50 years in the use, distribution, and importance of natural resources (including land, water, energy, food, renewable, non-renewable, and flow resources) on human life, settlement, and interactions by describing and evaluating								
<ul style="list-style-type: none"> change in spatial distribution and use of natural resources the differences in ways societies have been using and distributing natural resources social, political, economic, and environmental consequences of the development, distribution, and use of natural resources the impact of humans on the global environment 	X	X	X	X	X	X	X	X

6th Grade Science

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Inquiry Process -S.IP.07.15 Construct charts and graphs from data and observations.					X			
Inquiry Process-L.EC.06.41 Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance in ecosystems.					X			
Environmental Impact of Organisms-L.EC.06.41 Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance in ecosystems.	X		X			X	X	X
Environmental Impact of Organisms-L.EC.06.42 Predict possible consequences of overpopulation of organisms, including humans, (for example: species extinction, resource depletion, climate change, pollution).						X		

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Inquiry Process-S.IP.07.11 Generate scientific questions based on		X						
Inquiry Process-S.IP.07.14 Use metric measurement devices in an		X						
Inquiry Process-S.IP.07.15 Construct charts and graphs from data		X		X				
Inquiry Process-S.IP.07.16 Identify patterns in data		X		X				
Earth Systems-Solar Energy-E.ES.07.11 Demonstrate, using a model or drawing, the relationship between the warming by the sun of the Earth and the water cycle as it applies to the atmosphere (evaporation, water vapor, warm air rising, cooling, condensation, clouds).			X					
Human Consequences-E.ES.07.41 Explain how human activities (surface mining, deforestation, overpopulation, construction and urban development, farming, dams, landfills, and restoring natural areas) change the surface of the Earth and affect the survival of organisms.	X	X			X	X	X	X
Human Consequences-E.ES.07.42 Describe the origins of pollution in the atmosphere, geosphere, and hydrosphere, (car exhaust, industrial emissions, acid rain, and natural sources), and how pollution impacts habitats, climatic change, threatens or endangers species.	X	X			X	X		
Earth Systems-Water Cycle-E.ES.07.81 Explain the water cycle and describe how evaporation, transpiration, condensation, cloud formation, precipitation, infiltration, surface runoff, ground water, and absorption occur within the cycle.			X					
Earth Systems-Water Cycle-E.ES.07.82 Analyze the flow of water between the components of a watershed, including surface features (lakes, streams, rivers, wetlands) and groundwater.			X					



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Scientific Reflection and Social Implications-1.2k Analyze how science and society interact from a historical, political, economic, or social perspective.		X		X		X		X
Scientific Inquiry-1.1A Generate new questions that can be investigated in the laboratory or field.					X		X	
Earth Science-Climate Change-E5.4A Explain the natural mechanism of the greenhouse effect, including comparisons of the major greenhouse gases (water vapor, carbon dioxide, methane, nitrous oxide, and ozone).					X			
Earth Science-Climate Change-E5.4C Analyze the empirical relationship between the emissions of carbon dioxide, atmospheric carbon dioxide levels, and the average global temperature over the past 150 years.					X			
Earth Science-Climate Change-E5.4D Based on evidence of observable changes in recent history and climate change models, explain the consequences of warmer oceans (including the results of increased evaporation, shoreline and estuarine impacts, oceanic algae growth, and coral bleaching) and changing	X	X		X	X	X	X	
Earth Science-Climate Change-E5.4e Based on evidence from historical climate research (e.g. fossils, varves, ice core data) and climate change models, explain how the current melting of polar ice caps can impact the climatic system.					X			
Biology- Interdependence of Living Systems and the Environment- L3.p4 Human Impact on Ecosystems (prerequisite) All organisms cause changes in their environments. Some of these changes are detrimental, whereas others are beneficial. (prerequisite)	X	X	X		X	X	X	X
Interdependence of Living Systems and the Environment-L3.p4A Recognize that, and describe how, human beings are part of Earth's ecosystems. Note that human activities can deliberately or inadvertently alter the equilibrium in ecosystems. (prerequisite)		X		X		X	X	X
Biology-Changes in Ecosystem-B3.4C Examine the negative impact of human activities.	X	X	X	X	X	X	X	X
Biology-Human Impact-B3.4e List the possible causes and consequences of global warming.	X	X		X		X		
The Fluid Earth-Water Cycle-E4.p1A Describe that the water cycle includes evaporation, transpiration, condensation, precipitation, infiltration, surface runoff, groundwater, and absorption. (prerequisite)			X					
The Fluid Earth-Climate Change-E5.4D Based on evidence of observable changes in recent history and climate change models, explain the consequences of warmer oceans (including the results of increased evaporation, shoreline and estuarine impacts, oceanic algae growth, and coral bleaching) and changing climatic zones (including the adaptive capacity of the biosphere).			X					