YEARS OF LIVING STANDARDS AND EPISODES MATRIX



NEXT GENERATION SCIENCE STANDARDS - MS	Episode 1	Episode 2	Episode 3	Episode 4	Episode 5	Episode 6	Episode 7	Episode 8	Episode 9
ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS STUDENTS WHO DEMONSTRATE UNDERSTANDING CAN									
MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	~	V		V			V	V	~
MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	V	V			V	V	V	V	~
MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services. Earth's Systems	~	•			~	V	•		
EARTH'S SYSTEMS STUDENTS WHO DEMONSTRATE UNDERSTANDING CAN:									
MS-ESS2-4. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	~		~	~					
MS-ESS2-5. Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.	•	•	•		•	V		•	
EARTH AND HUMAN ACTIVITY STUDENTS WHO DEMONSTRATE UNDERSTANDING CAN:									
MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	V	V	V	V	V	V	V	V	~
MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	~	~	•	~	•	•	~	~	~
MS-ESS3-4. Construct an argument supported by evidence for how increase in human population and per-capita consumption of natural resources impact Earth's systems.	V		V		V			V	

YEARS OF LIVING STANDARDS AND EPISODES MATRIX



NEXT GENERATION SCIENCE STANDARDS - MS	Episode 1	Episode 2	Episode 3	Episode 4	Episode 5	Episode 6	Episode 7	Episode 8	Episode 9
MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	V	~	~	•	~	•	V	~	•
ENGINEERING DESIGN* STUDENTS WHO DEMONSTRATE UNDERSTANDING CAN:									
"MS-ETS1-1.Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions."									
MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.									
MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.									
MS-ETS1-4. Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.									

Although the curriculum does not provide for engineering opportunities, each episode has the potential to inspire and motivate educators and students to solve problems around issues presented. Activities for high school engineering programs will be added at a later date.