			Releva	nt Nex	Gene	ration	Science	Stand	ards –	Perfor	mance	Expect	ations	*
MoD Lesson	Purpose	K-PS2-1	K-PS3-1	K-PS3-2	K-ESS2-1	K-ESS3-2	K-2-ETS1-3	1-PS4-1	1-ESS1-2	2-PS1-4	2-ESS1-1	2-ESS2-1	2-ESS2-2	2-ESS2-3
Lightning:				•	•	•				•			•	
1. What is Lightning? (Science)	Learn about static electricity and its relationship to lightning	х				x		x						
2. Stay Safe When Lightning Strikes (Safety)	Learn how to stay safe if students or families are caught in a thunderstorm					x					x			
Tornadoes:														
1. Observing and Measuring the Wind (Science)	To learn about wind, its effects, and how to estimate wind speed.	х			x	x								
2. The Tornado Diaries (Science)	To learn about the properties of tornadoes	Х			х	х			х					
3. Be Tornado Safe (Safety)	Learn the difference between a tornado watch and warning, learn to recognize clues that indicate a possible tornado, learn about tornado safety				х	x								

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Hurricanes:													
	To build an												
1. What are	understanding of												
Hurricanes?	hurricanes and the	Х	Х		Х	Х							
(Science)	weather that can												
	accompany them												
	To learn about weather												
	observation and												
2. The Life and	prediction and to												
Times of	understand the		x		х	x		x					
Hurricanes	conditions that		^		^	^		^					
(Science)	contribute to the												
	formation of												
	hurricanes in the US												
	Learn about hurricane												
	watches and warnings.												
2 Cat Daadu	Learn what to do												
3. Get Ready,	before, during and					v							
Get Set, Go!	after a hurricane.					X							
(Safety)	Learn about dangers												
	that exist after												
	hurricanes.												
Floods:													
1. Water Science	To learn about the		х	х	х				х			х	x
(Science)	water cycle		^	^	~				^			^	^
2. What are	To understand the												
Floods? (Science)	relationship of floods				Х	Х	Х			Х	Х		
	to the water cycle												
3. Learn about	To learn how to												
Flood Safety	prepare when flood					x							
(Safety)	watches or warnings					^							
(Salety)	are issued.												

*Note: The specific NGSS Performance Expectations Standards and other information concerning science and engineering practices, disciplinary core ideas, and crosscutting concepts can be found on the NGSS website: <u>http://www.nextgenscience.org/next-generation-science-standards</u>. Prepared in 2015 by Alan E. Stewart, Ph. D.

Alignments of M	aster of Disaster (MoD) Le	essor	ns for	' Gra	des 3	8-5 w	vith t	he N	ext C	Gene	ratio	on Sci	ience	e Sta	ndar	ds (N	IGSS)			
			F	Relev	ant l	Vext	Gen	erati	on S	cienc	e Sta	anda	rds -	- Per	form	ance	Ехр	ecta	tions	*	
MoD Lesson	Purpose	3-ESS2-1	3-ESS2-2	3-ESS3-1	3-PS2-1	3-PS2-2	3-PS2-3	4-ESS2-1	4-ESS2-2	4-ESS3-2	4-PS3-2	4-PS3-3	4-PS3-4	4-PS4-1	5-ESS2-1	5-ESS2-2	5-LS1-1	5-LS2-1	5-PS2-1	3-5-ETS1-1	3-5-ETS1-2
Lightning:	•																				
1. What is Lightning? (Science)	To Learn about static electricity and its relationship to lightning	x					x			x	x		x								
2. How and Where Does Lightning Form? (Science)	To learn how electric charges contribute to lightning and to learn of the frequency of lighting in the US.	x					x		x		x										
3. Think Safety (Safety)	To find out how to stay safe during a thunderstorm			x			x			x											
4. Plan on Lightning Safety (Safety)	To help students and their families learn the Thunder Rule for Lightning Safety			x						x										x	x
Tornadoes:																					
1. How Do Tornadoes Form? (Science)	To provide an overview of tornado science.	x		x		x				x	x								x		
2. Where and When Do Tornadoes Form? (Science)	To learn about the geographical and climatic conditions that can underlie the formation of	x	x						x												

3. Tornadoes: Staying Safe (Safety)	severe storms and tornadoes Learn the difference between a tornado watch and warning, learn to recognize clues that indicate a possible tornado, learn about tornado safety	x							x							x
Hurricanes:	· · ·					•										
1. Hurricanes and Their Tracks (Science)	To learn how hurricanes form and the seasonal factors that contribute to them	x	x		x	x		x	x	x	x		х			
2. Hurricane Hazards: Wind (Science)	To learn about the hazards of hurricane winds and storm surges	x			x		x		x		х	х	х			
3. Hurricane Preparation (Safety)	To learn about hurricane watches and warnings and how to respond to each.	x		x				x	x							x
4. Response and Recovery (Safety)	To understand the need to evacuate before a hurricane and to learn about the dangers that exist during and after a hurricane			x					x							x

Floods:		<u>г</u>			 1	1	1	1	1	1		1		1	-	1	
1. The Hydrologic Cycle (Science)	To learn about the hydrologic cycle and how it can relate to floods	x	x		x	x		x			х	x	х	x			
2. What are Floods? (Science)	To understand the relationship of floods to the hydrologic cycle, terrain, and soil type	x			x		x				х	x					
3. Learn Flood Safety (Safety)	To learn how to prepare and stay safe during floods or flash floods	x		x			x									x	
4. Flood Risks (Safety)	To learn about flood risks people may experience depending where they live		x			x	x									x	x

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			Rele	evant	Next	Gene	ration	Scien	ice Sta	andar	ds – P	erforr	nance	Expe	ctatio	ns*	
MoD Lesson	Purpose	MS-ESS2-1	MS-ESS2-2	MS-ESS2-4	MS-ESS2-5	MS-ESS2-6	MS-ESS3-2	MS-ESS3-3	MS-LS1-6	MS-LS2-3	MS-PS1-4	MS-PS2-3	MS-PS2-5	MS-PS3-1	MS-PS3-4	MS-ETS1-1	MS-ETS1-2
Lightning:	I															1	
1. What is Lightning? (Science)	To Learn about static electricity and its relationship to lightning											x	x				
2. What's New in Lightning Science? (Science)	To learn new developments in lightning science				x		x					x	x				
3. Debunk the Myths and Share the Facts (Safety)	To replace myth about lightning with knowledge on how to stay safe from lightning						x									x	x
4. Put Lightning Safety in Your Plans (Safety)	To help students and their families identify safe places when lightning threatens						x									x	x

Tornadoes:													
1. Why and Where Do Tornadoes Form? (Science)	To understand how tornadoes form and to learn about where tornadoes frequently occur in the US			x	x	x		x					
2. The Power of Tornadoes (Science)	To learn about the way of classifying tornadoes by their strength and the damage they cause			x		x				x	x		
3. Tornado Safety and Awareness (Safety)	Learn the difference between a tornado watch and warning and what to action to take for each			x		x						x	×
4. Tornadoes Past and Present (Safety)	To learn how meteorologists help the public stay safe from tornadoes			x		x							
Hurricanes:													
1. Under Pressure (Science)	To learn about the concept of air pressure and its role in the formation of hurricanes	x	x	x	x			x					
2. Tracking Hurricanes (Science)	To learn about hurricane tracking			x		x							
3. Response and Recovery (Safety)	To learn how to prepare for hurricanes and to learn about the dangers that exist during and after a hurricane. To learn about hurricane recovery					x						x	x

1. The Hydrologic Cycle (Science)	To learn about the hydrologic cycle and how it can relate to floods	х	x	x	x	x	x	x				
2. What are Floods? (Science)	To understand the relationship of floods to the hydrologic cycle, terrain, and soil type	х	x	x	x							
3. Flood Risk (Safety)	To learn flood risks and ways to control flooding				х						х	
4. Flood Preparedness (Safety)	To learn about flood and flash flood watches and warnings and how to respond to each				x						x	

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