6 th Grade Yearlong Scope and Sequence									
Quarter 1	Quarto	er 2		Quar	ter 3		Quarter 4		
Unit 1 Energy	Unit 2 Relationships Among Organisms	Unit 3 Earth's Biomes and Ecosystems	Unit 4 Earth's Resources	Unit 5 Human Impact on the Environment	Unit 6 Earth's Water	Unit 7 Earth's Systems	Unit 8 Weather and Climate		
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks		
		UNIT 1: Ener	gy (8 weeks)						
		<u>Overarching</u>	Question(s)						
// //	H. H	low is energy transfe							
Three Dimensional Science	Components	1		cademic Standa					
DCI(s) PS3: Energy ETS1: Engineering Design Suggested Science and Engineering Developing and Using Models Planning and Carrying out Contr Analyzing and Interpreting Data Suggested Crosscutting Concept(s) Energy and Matter Stability and Change Scale, Proportion, and Quantity Systems and System Models Structure and Function	rolled Investigations	 6.PS3.1 Analyze the properties and compare the sources of kinetic, elastic potential, gravitational potential, electric potential, chemical, and thermal energy. 6.PS3.2 Construct a scientific explanation of the transformation between potential and kinetic energy. 6.PS3.3 Analyze and interpret data to show the relationship between kinetic energy and the mass of an object and its speed. 6.PS3.4 Conduct an investigation to demonstrate the way that heat (thermal energy) moves among objects through radiation, conduction, or convection. 6.ETS1.2 Design and test different solutions that impact energy transfer. 							

6 th Grade Yearlong Scope and Sequence									
Quarter 1	Quarto	er 2		Quarter 4					
				Unit 5					
Unit 1	Unit 2	Unit 3	Unit 4	Human	Unit 6	Unit 7	Unit 8		
	Relationships	Earth's Biomes	Earth's	Impact on	Earth's	Earth's	Weather and		
Energy	Among Organisms	and Ecosystems	Resources	the	Water	Systems	Climate		
				Environment					
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks		
	UNIT	2: Relationships Am		(4 weeks)					
			Question(s)						
	hy do organi <mark>sms</mark> intera	ct with the living and							
Three Dimensional Science	Components			Academic Standa					
DCI(s)		6.LS2.1 Evaluate ar	nd com <mark>mun</mark> icate	the impact of e	<mark>nv</mark> ironmental va	iriables <mark>on</mark> popu	lation size.		
LS2: Ecosystems: Inte <mark>ra</mark> ctions, Energ	gy, and <mark>Dynamics</mark>								
/ All (1997)	-8//	6.LS2.2 Determine	the impact of co	<mark>om</mark> petitive, symb	piot <mark>ic</mark> , and preda	itory inte <mark>ra</mark> ction	s in an		
Suggested Science and Engineering		ecosyst <mark>em.</mark>							
 Obtaining, Evaluating, and Company 	municating								
Information		6.LS2.3 Draw conclusions about the transfer of energy through a food web and energy pyramid in							
 Engaging in Argument from Evice 	lence	an ecosystem.							
 Developing and Using Models 									
 Constructing Explanations and D 		6.LS2.4 Using evidence from climate data, draw conclusions about the patterns of abiotic and							
 Asking Questions (for Science) a 	nd Def <mark>in</mark> ing Problems	biotic factors in different biomes, specifically the tundra, taiga, deciduous forest, desert,							
(for Engineering)		grasslands, rainforest, marine, and freshwater ecosystems.							
\ Ware		6.162.7.6							
Suggested Crosscutting Concept(s)		6.LS2.7 Compare and contrast auditory and visual methods of communication among organisms in relation to survival strategies of a population.							
Cause and Effect		in relation to surviv	al strategies of	a population.					
Patterns		70.0							
Energy and Matter									
 Systems and System Models 		****							
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		all walls of							

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6 th Grade Yearlong Scope and Sequence									
Quarter 1	Quarto	er 2			Quarter 4				
				Unit 5					
Unit 1	Unit 2	Unit 3	Unit 4	Human	Unit 6	Unit 7	Unit 8		
Energy	Relationships	Earth's Biomes	Earth's	Impact on	Earth's	Earth's	Weather and		
Lifeigy	Among Organisms	and Ecosystems	Resources	the	Water	Systems	Climate		
				Environment					
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks		
	UNIT	3: Earth's Biomes a		(5 weeks)					
		<u>Overarching</u>							
	vhy do organ <mark>ism</mark> s intera	act with their enviror							
Three Dimensional Science	Components			Academic Standa					
DCI(s)		6.LS2.4 Using evide							
LS2: Ecosystems: Interactions, Energ		biotic factors in diff				iduous f <mark>or</mark> est, d	esert,		
LS4: Biological Change: Unity and Div	versity	grasslands, rainfore	est, marin <mark>e, and</mark>	freshwater ecos	ys <mark>te</mark> ms.				
ESS2: Earth's Systems					11.40				
ETS1: Engineering D <mark>e</mark> sign		6.LS2.5 Analyze existing evidence about the effect of a specific invasive species on native							
		popula <mark>tions i</mark> n Tennessee and de <mark>sign a solution t</mark> o mitigate its impact.							
Suggested Science and Engineering									
Engaging in Argument from Evid		6.LS2.6 Research the ways in which an ecosystem has changed over time in response to changes							
Obtaining, Evaluating, and Comr	nunicating	in physical conditions, population balances, human interactions, and natural catastrophes.							
Information		C I CA A Francis have		altina natan mana alah t					
Asking Questions (for Science) a	nd Defining Problems	6.LS4.1 Explain how changes in biodiversity would impact ecosystem stability and natural							
(for Engineering)		resources.							
 Constructing Explanations and D 	esigning Solutions	6 ISA 2 Dosign a no	scible colution f	for maintaining h	iodiversity of e	cocyctoms while	ctill providing		
		6.LS4.2 Design a possible solution for maintaining biodiversity of ecosystems while still providing necessary human resources without disrupting environmental equilibrium.							
Suggested Crosscutting Concept(s)		necessary numan i	esources withou	at distupting city	ironnientai equi	inditalli.			
Patterns Constant Fff and		*6.FSS3.3 Assess th	e impacts of hu	man activities or	the hiosphere	including conse	rvation habitat		
Cause and Effect		*6.ESS3.3 Assess the impacts of human activities on the biosphere including conservation, habitat management, species endangerment, and extinction.*							
Stability and Change			.co chadige inc	arra extinictio					
		6.ETS1.1 Evaluate design constraints on solutions for maintaining ecosystems and biodiversity.							
		1//		1 (a)m/10	8 -	,	· - /		
		San Waller and							

6 th Grade Yearlong Scope and Sequence									
Quarter 1	Quarte	er 2		Quarter 4					
				Unit 5					
Unit 1	Unit 2	Unit 3	Unit 4	Human	Unit 6	Unit 7	Unit 8		
	Relationships	Earth's Biomes	Earth's	Impact on	Earth's	Earth's	Weather and		
Energy	Among Organisms	and Ecosystems	Resources	the	Water	Systems	Climate		
				Environment					
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks		
	UNIT 4: Earth's Re	sources and Human	Impact on the E	invironment (3 v	weeks)				
		Overarching	Question(s)						
/ / //	H	low is energy transfe	er <mark>red and c</mark> onsei	ved?					
/ ////	How do the Earth's	s surface processes a	i <mark>nd human</mark> activ	ities affect each	other?	•			
Three Dimensional Science	<u>Components</u>		TN A	cademic Standa	ard(s) for Science	<u>e</u>			
DCI(s)	9 3 / 65	6.PS3.4 Conduct ar	investigation to	demonstrate th	h <mark>e w</mark> ay that hea	t (therm <mark>al</mark> energ	gy) moves		
PS3: Energy		among objects thro	ough radiation, c	onduction, or co	onv <mark>ec</mark> tion.				
ESS3: Earth and Human Activity									
		6.ESS3.1 Differentia	5.ESS3.1 Differentiate between renewable and nonrenewable resources by asking questions						
Suggested Science and Engineering	Practice(s)	about their availability and sustainability.							
 Planning and Carrying out Contr 	rolled Investigations								
 Constructing Explanations and D 	Designing Solutions	6.ESS3.2 Investigate and compare existing and developing technologies that will utilize renewable							
Obtaining, Evaluating, and Compared to the Compared to th		and alternate energy sources.							
Information									
1 1000.1		6.ESS3.3 Assess the	e impacts of hun	nan activities on	the biosphere in	ncluding <mark>co</mark> nserv	vation, habitat		
Suggested Crosscutting Concept(s)		management, species endangerment, and extinction.							
System and System Models									
Cause and Effect									
Energy ad Matter									
Elicity ad Watter									
		11/1000							
		San Waller of							

		6th Grade Yearlong S	Scope and Seque	ence			
Quarter 1	Quart	er 2		Quar	ter 3		Quarter 4
Unit 1 Energy	Unit 2 Relationships Among Organisms	Unit 3 Earth's Biomes and Ecosystems	Unit 4 Earth's Resources	Unit 5 Human Impact on the	Unit 6 Earth's Water	Unit 7 Earth's Systems	Unit 8 Weather and Climate
8 weeks	4 weeks	5 weeks	3 weeks	Environment 2 weeks	1 week	3 weeks	9 weeks
o weeks		: Human Impact on			1 week	3 weeks	9 Weeks
	OMIT 3	Overarching		it (2 WCCR3)			
	A THE	low and why is Earth		nging?		2.1	
Three Dimensional Science	e Components		TN A	Academic Standa	rd(s) for Scienc	<u>e</u>	
DCI(s) ESS2: Earth Systems ESS3: Earth and Human Activity Suggested Science and Engineering Using Mathematical and Comp Constructing Explanations and Suggested Crosscutting Concept(s) Scale, Proportion, and Quantity Cause and Effect	utatio <mark>n</mark> al Thi <mark>nking</mark> Design <mark>i</mark> ng Solutions	6.ESS2.4 Apply scientimes and other 6.ESS3.3 Assess the management, special sp	organisms on the	ne hydrologic <mark>cy</mark> c nan activities on	l <mark>e.</mark> the <mark>bi</mark> osphere ii		

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		6 th Grade Yearlong S	Scope and Seque	ence			
Quarter 1	Quarte	er 2		Quarter 4			
Unit 1 Energy	Unit 2 Relationships Among Organisms	Unit 3 Earth's Biomes and Ecosystems	Unit 4 Earth's Resources	Unit 5 Human Impact on the Environment	Unit 6 Earth's Water	Unit 7 Earth's Systems	Unit 8 Weather and Climate
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks
o weeks	4 WEEKS	UNIT 6: Earth's			1 Week	3 Weeks	J WEEKS
		Overarching					
#	Н	ow and why is Earth		nging?	L. Taller II		
Three Dimensional Science		2000 1200		Academic Standa	rd(s) for Science	e	
DCI(s) ESS2: Earth's Systems ESS3: Earth and Human Activity Suggested Science and Engineering Using Mathematical and Compo Constructing Explanations and I Suggested Crosscutting Concept(s) Scale, Proportion, and Quantity Cause and Effect	utatio <mark>n</mark> al Thinking Designing Solutions	6.ESS3.3 Assess the management, special	organisms on the	ne hydrologic <mark>cy</mark> cl	le the <mark>b</mark> iosphere ir	40/	

		6th Grade Yearlong S	Scope and Seque	ence			
Quarter 1	Quart	er 2		Quart	er 3		Quarter 4
Unit 1 Energy	Unit 2 Relationships Among Organisms	Unit 3 Earth's Biomes and Ecosystems	Unit 4 Earth's Resources	Unit 5 Human Impact on the Environment	Unit 6 Earth's Water	Unit 7 Earth's Systems	Unit 8 Weather and Climate
8 weeks	4 weeks	5 weeks	3 weeks	2 weeks	1 week	3 weeks	9 weeks
		UNIT 7: Earth's S Overarching	Question(s)				
Three Dimensional Science		low and why is Earth		nging? Academic Standar	ud/a) for Caiona		
DCI(s) ESS2: Earth Systems	9// 6	6.ESS2.1 Gather ev transfer of heat en	idence to justify ergy and differe	that oceanic connces in salt conce	vection curren ntration leadin	ts are c <mark>au</mark> sed by ng to glob <mark>al</mark> wate	er movement.
Suggested Science and Engineerin Engaging in Argument from Ev Developing and Using Models Constructing Explanations and Suggested Crosscutting Concept(s Cause and Effect Systems and System Models	6.ESS2.3 Construct currents affect the	explanation for	how atmospheric	c flo <mark>w</mark> , geograp			

		6th Grade Yearlong S	Scope and Sequ	ence			
Quarter 1	Quarto	er 2		Quarter 4			
Unit 1 Energy	Unit 2 Relationships Among Organisms	Unit 3 Earth's Biomes and Ecosystems	Unit 4 Earth's Resources	Unit 5 Human Impact on the	Unit 6 Earth's Water	Unit 7 Earth's Systems	Unit 8 Weather and Climate
8 weeks	4 weeks	5 weeks	3 weeks	Environment 2 weeks	1 week	3 weeks	9 weeks
o weeks		UNIT 8: Weather an			1 WEEK	3 WEEKS	J Weeks
		Overarching	-	Jeney 1			
J 2000	Н	low and why is Earth		nging?	1		
Three Dimensional Science				Academic Standa	rd(s) for Scienc	<u>e</u>	
DCI(s) ESS2: Earth's Systems Suggested Science and Engineering Developing and Using Models Constructing Explanations and I Analyzing and Interpreting Data Suggested Crosscutting Concept(s) Systems and Systems Models Energy and Matter	Designing Solutions	 6.ESS2.2 Diagram of 6.ESS2.3 Construct currents affect the 6.ESS2.5 Analyze at to predict probable 6.ESS2.6 Explain ho and low pressure standing 	explanation for climate of a reg nd interpret date local weather power lationships	how atmosphericion through heat a from weather coatterns and concess between the mo	c flow, geograp transfer. onditions, wea ditions. vement and int	ohic featu <mark>re</mark> s, an ther maps, satel teractions <mark>of</mark> air	d ocean llites, and radar masses, high
				1861	3		