### **Based on 45 Minutes of Instruction Daily**

					7		
Th	Standard 5-1: Scientific Inquiry The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and mathematical thinking necessary to conduct a controlled scientific investigation.						
	NOTE	Inquiry	indicators should be embedded within each co	ntent standard and ta	ught throughout the school year.		
5-1.1	5-1.1 Identify questions suitable for generating a hypothesis.						
5-1.2	Identify independ	ent (mar	nipulated), dependent (responding), and controll	ed variables in an exp	eriment.		
5-1.3	Plan and conduct	controlle	ed scientific investigations, manipulating one var	iable at a time.			
5-1.4	Use appropriate t investigation.	ools and	instruments (including a timing device and a 10	Ox magnifier) safely ar	nd accurately when conducting a controlled scientific		
5-1.5	Construct a line g	raph fror	n recorded data with correct placement of indep	endent (manipulated)	and dependent (responding) variables.		
5-1.6	Evaluate results on written form.	of an inv	estigation to formulate a valid conclusion base	d on evidence and co	ommunicate the findings of the evaluation in oral or		
5-1.7	Use a simple tech	nologica	l design process to develop a solution or a produ	ct, communicating the	e design by using descriptions, models, and drawings.		
5-1.8	Use appropriate s	afety pro	ocedures when conducting investigations.				
	DATES TAUGHT:		INDICATORS:	SUGGESTED PACING:	RESOURCES:		
			<b>FIRST NINE</b>	WEEKS			
*	Note: Before starti	The stu ng the N	Standard 5-5: Forces udent will demonstrate an understanding of the lotion and Design Kit, teachers will use the first stand	s and Motion e nature of force and r 2 investigations from dards.	notion. (Physical Science) the FOSS Variables Kit to introduce the inquiry		
			Primary Resource: FOSS Variables ki Conduct FOSS Variables	t and STC Motion & D Pre-Assessment	esign kit		
		5-1.4	Use appropriate tools and instruments (including a timing device and a 10x magnifier) safely and accurately when conducting a controlled scientific investigation.	1 day	FOSS Variables Kit Investigation 1 Part 1 *Read <u>after</u> completing Inv. 1, Part 1: FOSS Science Stories, "What Scientists Do"" (Follow Science Stories folio guide – p. 2-3 – for guided reading questions and extensions).		
		5-1.2 5-1.3	Identify independent (manipulated), dependent (responding), and controlled variables in an experiment. Plan and conduct controlled scientific investigations, manipulating one variable at a time.	1 day	FOSS Variables Kit Investigation 1 Part 2		
		5-1.5	Construct a line graph from recorded data with correct placement of independent (manipulated) and dependent (responding) variables.	1 day	FOSS Variables Kit Investigation 1 Part 3 *Read <u>after</u> completing Inv. 1, Part 3: FOSS Science Stories, "Swinging Through History" (Follow Science Stories folio guide – p. 4-5 – for guided reading questions and extensions).		
			Complete I-check for Investigati	ion 1 (Formative) (1 da	ay)		
		5-1.7	Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings.	2 days (1 day/lesson)	FOSS Variables Kit Investigation 2 Part 1		
		5-1.6	Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form.	4-6 days (1 day/lesson)	FOSS Variables Kit Investigation 2 Parts 2 & 3 *Read <u>after</u> completing Inv. 2, Part 2: FOSS Science Stories, "Sink or Swim?" (Follow Science Stories folio guide – p. 6-7 – for guided reading questions and extensions). *Read <u>after</u> completing Inv. 2, Part 3: FOSS Science Stories, "Science in the Bathtub" (Follow Science Stories folio guide – p. 8-9 – for guided reading		

		questions and extensions).			
Complete I-check for Investigation 2 (Formative) (1 day)					
STC Assessment	t Packet				
5-5.1 Illustrate the affects of force (including magnetism, gravity, and friction) on motion.	Incorporated throughout all investigations	STC Motion and Design Kit			
	3 days	<b>STC Motion and Design Kit</b> Lessons 1, 2 (for conceptual development)			
<ul> <li>5-5.6 Explain how a change of force or a change in mass affects the motion of an object.</li> <li>5-5.2 Summarize the motion on an object in terms of position, direction, and speed.</li> <li>5-5.3 Explain how unbalanced forces affect the rate and direction of motion in objects.</li> <li>5-5.5 Use a graph to illustrate the motion of an object.</li> </ul>	5-6 days (1 day/lesson)	STC Motion and Design Kit Lessons 3, 4 *Incorporate into discussions while doing the investigation. If you need additional activities: G2_L09_Forces_Movement_final.notebook			

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CURRICULUM AND INSTRUCTION JUNE 2013

#### **Based on 45 Minutes of Instruction Daily**

· · · · · · · · · · · · · · · · · · ·			···· <b>/</b>		
	Standard 5-1: Scientific Inquiry				
The student will demo	The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and				
	mathematical thinking necessary to conduct	a controlled scientifie	c investigation.		
NOTE:	Inquiry indicators should be embedded within each cor	itent standard and ta	ught throughout the school year.		
5-1.1 Identify questions	suitable for generating a hypothesis.		rim out		
5-1.2 Identity independe	ent (manipulated), dependent (responding), and controlle	a variables in an expe	nment.		
5-1.7 Use appropriate to	controlled sciencific investigations, manipulating one variables and a 10x	magnifier) safely and	accurately when conducting a controlled scientific		
investigation.		inagimer / sarely and	accurately when conducting a controlled scientific		
5-1.5 Construct a line gr	aph from recorded data with correct placement of indepe	endent (manipulated)	and dependent (responding) variables.		
5-1.6 Evaluate results of	an investigation to formulate a valid conclusion based or	n evidence and comm	unicate the findings of the evaluation in oral or		
written form.	0		C C		
5-1.7 Use a simple techr	nological design process to develop a solution or a produc	t, communicating the	design by using descriptions, models, and drawings.		
5-1.8 Use appropriate sa	fety procedures when conducting investigations.				
DATES TAUGHT:	INDICATORS:	SUGGESTED PACING:	RESOURCES:		
	FIRST NINE WEE	KS (continued)			
	5-5.4 Explain ways to change the effect that friction				
	has on the motion of objects (including		STC Motion and Design Kit		
	changing the texture of the surfaces,		Lessons 5, 6		
	changing the amount of surface area		, ,		
		2 4			
	object.	2 days (1 day/lesson)	Lessons 7		
	5-5.4 Explain ways to change the effect that friction				
	has on the motion of objects (including	5-6 days	STC Motion and Design Kit		
	changing the texture of the surfaces,	(1 day/lesson)	8 9 10 11		
	changing the amount of surface area	(1 ddy/103011)	0, 9, 10, 11		
	involved, and adding lubrication).				
	5-1.7 Use a simple technological design process to				
	develop a solution or a product,	5-6 days	SIC Motion and Design Kit		
	descriptions models and drawings		Lesson 12, 13, 14, 15, 16, 17		
	descriptions, models, and drawings.				
	Complete Final Summative STC Motion & Design	1 day			
	Standard 5-5: Forces	and Motion			
	The student will demonstrate an understanding of the	nature of force and n	notion. (Physical Science)		
FOSS Vai	riables Kit Investigations 3 and 4 is a great culminating a	ctivity for this unit (or	before PASS testing in the Spring).		
			FOSS Variables Kit		
			investigations 3 Parts 1, 2, 3, 4		
			*Read after completing Inv. 3. Part 1: EOSS Science		
			Stories. "Airplane Basics" (Follow Science Stories		
			folio guide – p. 10-11 – for guided reading		
			questions and extensions).		
			* Pood after completing Inv 2 Port 2. FOCC Coisses		
			Stories "Great Names in Aviation History" (Follow)		
	5-1.2 Identify independent (manipulated),		Science Stories folio guide $-n$ 12-13 $-$ for guided		
	dependent (responding), and controlled		reading questions and extensions).		
	variables in an experiment.		0 11 11 11 11 11 11 11 11 11 11 11 11 11		
	5-1.3 Plan and conduct controlled scientific	Edove	*Read after completing Inv. 3, Part 3: FOSS Science		
	time	5 udys	Stories, "Build Your Own Paper Airplane" (Follow		
	5-1.5 Construct a line graph from recorded data		Science Stories folio guide – p. 14-15 – for guided		
	with correct placement of independent		reading questions and extensions).		

	(manipulated) and dependent (responding) variables.	Investigation 4 Parts 1, 2, 3, 4		
		*Read <u>after</u> completing Inv. 4, Part 2: FOSS Science Stories, "Flingers" (Follow Science Stories folio guide – p. 16-17 – for guided reading questions and extensions).		
		*Read <u>after</u> completing Inv. 4, Part 3: FOSS Science Stories, "Prove It!" (Follow Science Stories folio guide – p. 18-19 – for guided reading questions and extensions).		
FOSS Variables End of Module Assessments (2 days)				

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CURRICULUM AND INSTRUCTION JUNE 2013

#### **Based on 45 Minutes of Instruction Daily**

			Standard 5-1: Scien	tific Inquiry			
The	student will demo	onstrate	an understanding of scientific inquiry, including	the foundations of t	echnological design and the processes, skills, and		
			mathematical thinking necessary to conduct	a controlled scientif	ic investigation.		
	NOTE:	Inquiry	/ indicators should be embedded within each co	ntent standard and ta	aught throughout the school year.		
5-1.1	-1.1 Identify questions suitable for generating a hypothesis.						
5-1.2	Identify independ	ent (ma	nipulated), dependent (responding), and controlle	ed variables in an exp	eriment.		
5-1.3	Plan and conduct	controll	ed scientific investigations, manipulating one vari	able at a time.			
5-1.4	Use appropriate 1	tools an	d instruments (including a timing device and a 10	Ox magnifier) safely a	nd accurately when conducting a controlled scientific		
	investigation.						
5-1.7	Construct a line gr	raph fro	m recorded data with correct placement of indep	endent (manipulated	) and dependent (responding) variables.		
5-1.6	Evaluate results o	of an inv	vestigation to formulate a valid conclusion based	a on evidence and co	ommunicate the findings of the evaluation in oral or		
5-17	Witten form.		design process to develop a solution or a produc	t communicating the	design by using descriptions models and drawings		
5-1.7	Use a simple techn	ofoty pr	acedures when conducting investigations	t, communicating the	design by using descriptions, models, and drawings.		
J-1.8			ocedures when conducting investigations.	SUCCESTED			
	TAUGHT:		INDICATORS:	PACING:	RESOURCES:		
			Second Nine	WEEKS			
			Standard 5-3: Landform	ns and Oceans			
	The stu	udent w	ill demonstrate an understanding of features, pro	cesses, and changes	n Earth's land and oceans. (Earth Science)		
			Primary Resource: FOSS Landforn	ns kit and DSM Ocea	ns kit		
		1	Conduct FOSS Landforms	s Pre-Assessment			
		5-1.7	Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings.	5 days	FOSS Landforms Kit Investigation 1 Parts 1, 2, 3 *Read <u>after</u> completing Inv. 1, Part 2: FOSS Science Stories, "Maps and How They are Made and Ancient Maps" (Follow Science Stories folio guide – p. 2-3 – for guided reading questions and extensions).		
			Complete I-check for Investigati	on 1 (Formative) (1 d	av)		
					FOSS Landforms Kit		
		5-3.1	Explain how natural processes (including weathering, erosion, deposition, landslides, volcanic eruptions, earthquakes, and floods) affect Earth's oceans and land in constructive and destructive ways.	4 days	Investigation 2 Parts 1 & 2 *Read <u>after</u> completing Inv. 2, Part 1: FOSS Science Stories, "Real People in the Grand Canyon" (Follow Science Stories folio guide – p. 4-5 – for guided reading questions and extensions).		
			Complete I-check for Investigati	on 2 (Formative) (1 d	ay)		
		5-3.6	Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.	5 days	FOSS Landforms Kit Investigation 3 Parts 1, 2, 3 *Read <u>after</u> completing Inv. 3, Part 1: FOSS Science Stories, "Rivers and Controlling the Flow" (Follow Science Stories folio guide – p. 6-7 – for guided reading questions and extensions). *Read <u>after</u> completing Inv. 3, Part 3: FOSS Science Stories, "Shapes of the Earth" (Follow Science Stories folio guide – p. 8-9 – for guided reading questions and extensions).		
			Complete I-check for Investigati	on 3 (Formative) (1 d	ау)		
		5-3.1	Explain how natural processes (including weathering, erosion, deposition, landslides, volcanic eruptions, earthquakes, and floods) affect Earth's oceans and land in constructive	5 days	FOSS Landforms Kit Investigation 4 Parts 1, 2, 3 *Read <u>after</u> completing Inv. 4, Part 1: FOSS Science Stories, "The Story of Mount Shasta" (Follow Science Stories folio guide – p. 10-11 – for guided reading questions and extensions).		
			and destructive ways.		Stories, "Topographic Maps" (Follow Science		

			Stories folio guide – p. 12-13– for guided reading questions and extensions).	
	Complete I-check for Investig	ation 4 (Formative) (1 da	ay)	
5-3.1 EX w vc af ar	xplain how natural processes (including veathering, erosion, deposition, landslides, olcanic eruptions, earthquakes, and floods) ffect Earth's oceans and land in constructive nd destructive ways.	1 day	FOSS Landforms Kit Investigation 5 *Read <u>after</u> completing Inv. 5, Part 1: FOSS Science Stories, "Aerial Photography" (Follow Science Stories folio guide – p. 14-15 – for guided reading questions and extensions). *Read <u>after</u> completing Inv. 5, Part 2: FOSS Science Stories, "National Parks" (Follow Science Stories folio guide – p. 16-17 – for guided reading questions and extensions). *Read <u>after</u> completing Inv. 5, Part 3: FOSS Science Stories, "The Eye of the Needle" (Follow Science Stories folio guide – p. 18-19 – for guided reading questions and extensions).	
Complete I-check for Investigation 5 (Formative) (1 day)				
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#### **Based on 45 Minutes of Instruction Daily**

-	Dased on 45 windles of instruction Daily								
			Standard 5-1:	Scientific Inquiry					
т	he student will	demonstr	rate an understanding of scientific inquiry, incl	uding the foundation	ns of technological design and the processes, skills, and				
	mathematical thinking necessary to conduct a controlled scientific investigation.								
	NOTE: Inquiry indicators should be embedded within each content standard and taught throughout the school year.								
5-1.1	Identify questi	ons suital	ole for generating a hypothesis.						
5-1.2	-1.2 Identify independent (manipulated), dependent (responding), and controlled variables in an experiment.								
5-1.3	-1.3 Plan and conduct controlled scientific investigations, manipulating one variable at a time.								
5-1.4	Use appropriat investigation.	te tools ar	nd instruments (including a timing device and a	10x magnifier) safely	y and accurately when conducting a controlled scientific				
5-1.5	Construct a line	e graph fr	om recorded data with correct placement of in	dependent (manipul	ated) and dependent (responding) variables.				
5-1.5	Evaluate result	ts of an in	vestigation to formulate a valid conclusion base	ed on evidence and c	communicate the findings of the evaluation in oral or written				
	form.								
5-1.7	Use a simple te	echnologi	cal design process to develop a solution or a pro	oduct, communicatin	ng the design by using descriptions, models, and drawings.				
5-1.8	Use appropriat	te safety p	procedures when conducting investigations.						
	DATES TAUGHT:		INDICATORS:	SUGGESTED PACING:	RESOURCES:				
			Second Nine	WEEKS (CONTINU	ED)				
		5-3.5	Compare the movement of water by	4-5 days	DSM Oceans Kit				
			waves, currents, and tides.	(1 day/lesson)	Activities 2, 3, 7, 9				
		5-3.2	Illustrate the geological landforms of the		DSM Occorre Kit				
			and slope, the mid-ocean ridge, rift zone	1 day					
			trench and the ocean hasin )		Activity 4				
		5-3.1	Explain how natural processes (including						
		0 0.1	weathering, erosion, deposition, landslides.						
			volcanic eruptions, earthquakes, and						
			floods) affect Earth's oceans and land in	3 days	DSM Oceans Kit				
			constructive and destructive ways.	-	ACTIVITIES 4, 6, 7				
		5-3.3	Compare continental and oceanic						
			landforms.						
		5-3.4	Explain how waves, currents, tides, and						
			storms affect the geologic features of the	3 days	DSM Oceans Kit				
			ocean shore zone (including beaches,	5 ddy5	Activities 6, 8, 9				
			barrier islands, estuaries, and inlets).						
			Complete FOSS Landforms/Delta Oce	ans End of Module A	ssessments (2 days)				
					TEST 1				
			I nira Ni	ne weeks					
			<b>Standard 5-4: Mi</b> The student will demonstrate an understan	xtures and Solutions ding of properties of	matter. (Physical Science)				
			Primary Resource: FOSS	6 Mixtures and Solut	ions kit				
			Conduct FOSS Mixtures a	nd Solutions Pre-Ass	essment				
		5-4 1	Recall that matter is made up of particles		See S3 Curriculum				
		5-4.1	too small to be seen.	2 days	http://www.s2temsc.org/s3curriculum/k8science/5thgrade for lesson for 5-4.1				
		5-4.2	Compare the physical properties of the						
		_	states of matter (including volume, shape,		See S3 Curriculum				
			and the movement and spacing of	2 days	http://www.s2temsc.org/s3curriculum/k8science/5thgrade				
			particles).		I OF IESSON TOF 5-4.2				
					FOSS Mixtures and Solutions Kit				
		5-4.4	Use the processes of filtration, sifting,		Investigation 1 Parts 1, 2, 3, 4				
			magnetic attraction, evaporation,		*Read <u>after</u> completing Inv. 1, Part 2: FOSS Science Stories,				
			chromatography, and floatation to	4-5 davs	"Mixtures & Solutions" (Follow Science Stories folio guide –				
			separate mixtures.	/-	p. 2-3– for guided reading questions and extensions).				
		5-4.3	Summarize the characteristics of a mixture,		Kead <u>arter</u> completing Inv. 1, Part 3: FOSS Science Stories,				

	recognizing a solution is a type of mixture.		for guided reading questions and extensions).
	Complete I-check for Inves	stigation 1 (Formative	e) (1 day)
5-4	I.5 Explain how the solute and the solvent in a solution determine the concentration.	2-3 days	FOSS Mixtures and Solutions Kit Investigation 2 Parts 1 & 2 *Read <u>after</u> completing Inv. 2, Part 1: FOSS Science Stories, "Decompression Sickness" (Follow Science Stories folio guide – p. 6-7– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 2, Part 2: FOSS Science Stories, "Sour Power" (Follow Science Stories folio guide – p. 8-9– for guided reading questions and extensions).
5-4	I.4 Use the processes of filtration, sifting, magnetic attraction, evaporation, chromatography, and floatation to separate mixtures.	2-3 days	FOSS Mixtures and Solutions Kit Investigation 2 Parts 3 &4
	Complete I-check for Inves	stigation 2 (Formative	e) (1 day)

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ientific Inquiry					
ing the foundatio	ns of technological design and the processes, skills, and				
uct a controlled s	cientific investigation.				
CONTENT Stanuard	and taught throughout the school year.				
rolled variables in	an experiment.				
variable at a time.					
a 10x magnifier) s	afely and accurately when conducting a controlled scientific				
lependent (manip	pulated) and dependent (responding) variables.				
ised on evidence	and communicate the findings of the evaluation in oral or				
duct, communica	ting the design by using descriptions, models, and drawings.				
SUGGESTED					
PACING:	RESOURCES:				
KS (CONTINU	IED)				
2-3 days	FOSS Mixtures and Solutions Kit Investigation 3 Parts 1, 2 & 3 *Read <u>after</u> completing Inv. 3, Part 2: FOSS Science Stories, "Grow Your Own Crystals" (Follow Science Stories folio guide – p. 10-11– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 3, Part 3: FOSS Science Stories, "The Air You Breathe" (Follow Science Stories folio guide – p. 12-13– for guided reading questions and extensions).				
gation 3 (Formativ	ve) (1 day)				
7-8 days	FOSS Mixtures and Solutions Kit Investigation 4 Parts 1, 2, 3, 4 *Read <u>after</u> completing Inv. 4, Part 1: FOSS Science Stories, "What a Reaction!" (Follow Science Stories folio guide – p. 14-15– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 4, Part 2: FOSS Science Stories, "Ask a Chemist and The Periodic Table" (Follow Science Stories folio guide – p. 16-17– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 4, Part 3: FOSS Science Stories, "The History of Rubber" (Follow Science Stories folio guide – p. 18-19– for guided reading questions and extensions).				
gation 4 (Formati	ve) 1 day				
End of Module A	ssessment (1 day)				
ADMINISTER DISTRICT COMMON ASSESSMENT TEST 2					
If CORTENTINE WEERS         Standard 5-2: Ecosystems         The student will demonstrate an understanding of relationships among biotic and abiotic factors within terrestrial and aquatic ecosystems. (Life Science)         Primary Resource: FOSS Environments kit         Conduct EOSS Environments Pre Assessment					
	See S3 Curriculum				
2 days	http://www.s2temsc.org/s3curriculum/k8science/5thgrade for lesson for 5-2.1 FOSS Environments Kit				
	ientific Inquiry ing the foundation uct a controlled s content standard folled variables in variable at a time. a 10x magnifier) s lependent (manipused on evidence vduct, communica SUGGESTED PACING: KS (CONTINU 2-3 days 2-3 days gation 3 (Formativ 7-8 days For a days 7-8 days Construction SS Environments nents Pre-Assessor 2 days 2 days				

5-1.6 5-2.3	Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written format. Compare the characteristics of different ecosystems (including estuaries/salt marshes, oceans, lakes and ponds, forests, and grasslands).	4 days	Investigation 1 Parts 1 & 2 *Read <u>after</u> completing Inv. 1, Part 1: FOSS Science Stories, "Amazon Rainforest Journal" (Follow Science Stories folio guide – p. 2-3– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 1, Part 2: FOSS Science Stories, "Terrestrial Environments Around the World" (Follow Science Stories folio guide – p. 4-5– for guided reading questions and extensions).	
Complete I-check for Investigation 1 (Formative) (1 day)				

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Standard 5-1: Scientific Inquiry The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and mathematical thinking necessary to conduct a controlled scientific investigation.									
	NOTE: Inquiry indicators should be embedded within each content standard and taught throughout the school year.								
5-1.1 Identif	1.1 Identify questions suitable for generating a hypothesis.								
5-1.2 Identif	y independent (manipulated), dependent (responding), and contro	olled variables ir	an experiment.						
5-1.3 Plan a	nd conduct controlled scientific investigations, manipulating one v	ariable at a time							
5-1.4 Use ap investi	propriate tools and instruments (including a timing device and a a gation.	10x magnifier) s	afely and accurately when conducting a controlled scientific						
5-1.5 Constr	uct a line graph from recorded data with correct placement of inde	ependent (manii	pulated) and dependent (responding) variables.						
5-1.6 Evalua	ite results of an investigation to formulate a valid conclusion bas	sed on evidence	and communicate the findings of the evaluation in oral or						
5-1.7 Use a s	imple technological design process to develop a solution or a prod	uct. communica	ting the design by using descriptions, models, and drawings						
5-1.8 Use an	propriate safety procedures when conducting investigations								
	propriate safety procedures when conducting investigations.	SUCCESTED							
TAUGHT:	INDICATORS:	PACING:	RESOURCES:						
	FOURTH NINE WEE	KS (CONTIN	UED)						
			FOSS Environments Kit						
5-2	2.5 Explain how limiting factors (including food, water, space		*Read after completing Inv. 2 Part 1: EOSS Science						
	and shelter) affect populations in ecosystems.		Stories "Bootles" (Follow Science Stories folio guide – n						
			$6_7$ for guided reading questions and extensions)						
5-2	2.4 Identify the roles of organisms as they interact and		*Read after completing Inv. 2. Part 2: EOSS Science						
	depend on one another through food chains and food	5 days	Stories "The Darkling Beetle" (Follow Science Stories folio						
	webs in an ecosystem, considering producers and		such as $-n - 8 - 9 - 6$ for guided reading questions and						
	consumers (carnivores and omnivores), decomposers		extensions)						
	(microorganisms, termites, worms, and fungi), predators		*Pood after completing Inv. 2 Part 2: EOSS Science						
	and prey, and parasites and hosts.		Storios "Isonode" (Follow Science Storios folio guido - n						
			10.11 for guided reading questions and extensions)						
	Complete Laborit for Investiga		10-11-101 guided reading questions and extensions).						
	Complete I-check for investiga	ition 2 (Formativ							
			FUSS Environments Kit						
	2.5. Eveloin how limiting factors (including food, water, ended		Investigation 3 Parts 1, 2, 3						
5-4	2.5 Explain now limiting factors (including food, water, space	5 days	Steries "Auntic's Diants" (Follow Science Steries falia						
	and shelter) affect populations in ecosystems.		Stories, Auntie's Plants (Follow Science Stories follo						
			guide – p. 12-13– for guided reading questions and						
			extensions).						
	Complete I-check for Investiga	ition 3 (Formativ	(e) (1 day)						
			FOSS Environments Kit						
			Investigation 4 Parts 1, 2, 3						
5-,	2.3 Compare the characteristics of different ecosystems		*Read <u>after</u> completing Inv. 4, Part 1: FOSS Science						
	(including estuaries/salt marshes, oceans, lakes and ponds,		Stories, "Aquatic Environments Around the World"						
	forests, and grasslands).		(Follow Science Stories folio guide – p. 14-15– for guided						
			reading questions and extensions).						
5-,	2.2 Summarize the composition of an ecosystem, considering	5 days	*Read <u>after</u> completing Inv. 4, Part 3: FOSS Science						
	both blotic factors (including populations to the level of		Stories, "Water Pollution: The Lake Erie Story and Sources						
	microorganisms and communities) and abiotic factors.		of Water Pollution" (Follow Science Stories folio guide – p.						
	2. E. Evelain have limiting factors (including factors)		10-17- Tor guided reading questions and extensions).						
5-4	2.5 Explain now limiting factors (including food, water, space		*Read <u>after</u> completing Inv. 4, Part 3: FOSS Science						
	and shelter) affect populations in ecosystems.		Stories, "What is an Ecosystem?" (Follow Science Stories						
			iono guide – p. 18-19– for guided reading questions and						
		11. A / T	extensions).						
	Complete I-check for Investiga	ation 4 (Formativ	/e) (1 day)						
			FOSS Environments Kit						
			Investigation 5 Parts 1, 2, 3						
			*Read <u>atter</u> completing Inv. 5, Part 1: FOSS Science						
			stories, "Brine Snrimp" (Follow Science Stories folio guide						

5-2.3	Compare the characteristics of different ecosystems (including estuaries/salt marshes, oceans, lakes and ponds, forests, and grasslands).	4 days	<ul> <li>*Read <u>after</u> completing Inv. 5, Part 2: FOSS Science Stories, "The Mono Lake Story" (Follow Science Stories folio guide – p. 22-23– for guided reading questions and extensions).</li> <li>*Read <u>after</u> completing Inv. 5, Part 3: FOSS Science Stories, "Shrimp Aquaculture" (Follow Science Stories folio guide – p. 24-25– for guided reading questions and extensions).</li> </ul>
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CURRICULUM AND INSTRUCTION JUNE 2013

### **Based on 45 Minutes of Instruction Daily**

Standard 5-1: Scientific Inquiry The student will demonstrate an understanding of scientific inquiry, including the foundations of technological design and the processes, skills, and mathematical thinking necessary to conduct a controlled scientific investigation.			
NOTE: Inquiry indicators should be embedded within each content standard and taught throughout the school year.			
5-1.1 Identify questions suitable for generating a hypothesis.			
5-1.2 Id	.2 Identify independent (manipulated), dependent (responding), and controlled variables in an experiment.		
5-1.3 Pl	1.3 Plan and conduct controlled scientific investigations, manipulating one variable at a time.		
5-1.4 Use appropriate tools and instruments (including a timing device and a 10x magnifier) safely and accurately when conducting a controlled scientific investigation.			
5-1.5 Construct a line graph from recorded data with correct placement of independent (manipulated) and dependent (responding) variables.			
5-1.6 Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form.			
5-1.7 Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings.			
5-1.8 Use appropriate safety procedures when conducting investigations.			
DATES TAUGHT:	INDICATORS:	SUGGESTED PACING:	RESOURCES:
FOURTH NINE WEEKS (CONTINUED)			
	5-2.5 Explain how limiting factors (including food, water, space and shelter) affect populations in ecosystems.	4 days	FOSS Environments Kit Investigation 6 Parts 1, 2, 3 *Read <u>after</u> completing Inv. 6, Part 1: FOSS Science Stories, "Breeding Plants" (Follow Science Stories folio guide – p. 26-27– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 6, Part 2: FOSS Science Stories, "What Happens When Ecosystems Change?" (Follow Science Stories folio guide – p. 28-29– for guided reading questions and extensions). *Read <u>after</u> completing Inv. 6, Part 2: FOSS Science Stories, "How Organisms Depend on Each Other" (Follow Science Stories folio guide – p. 30-31– for guided reading questions and extensions).
Complete I-Check for Investigation 6			
Complete FOSS Environments End of Module Assessment (1 day)			

#### **NOTE:** THIS INSTRUCTIONAL GUIDE IS BUILT TO ASSIST IN PROVIDING TIME FOR REVIEW AND REMEDIATION FOR STATE ASSESSMENT. IT IS ESSENTIAL TO USE THE SC SCIENCE SUPPORT DOCUMENT IN CONJUNCTION WITH THE PACING GUIDE.

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