Physical Science

Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
3.2.4.A1	Changes in an object's speed, motion,	Students will be able to observe that			motion
3.2.4.B1	direction, or position are caused by forces	the greater the force an object has, the	FOSS:		
	and can be observed and measured.	greater the change in motion of that	MAGNETISM AND ELECTRICITY	Chapter 2 Test	electricity
		object.			
			(Mandatory!)		insulator
3.2.4.B2	There are different types of energy; energy	Students will be able to identify			
3.2.4.B6	can be stored and changed from one form to		Unit F Ch. 2 Lesson 1 Investigate F38-39		system
	another.	how they are applied in everyday life.			
			Unit F Ch. 2 Lesson 2 Investigate F 44-45		technology
3.2.4.B3	Objects that emit light often emit heat.		F45 Process Skill Tip:Plan & Conduct an Investigation		
			F47 Investigation Challenge: Observing the Effects of		magnetism
3.2.4.B	Electric circuits require a closed pathway	Students will be able to identify objects	Friction		
	through which an elecctric current	that will conduct electricity.	District Materials: "Finger Boomerangs", "Four-Wing		conductor
	can pass.		Paper Boomerang"		
					electromagnetic
3.2.4.B4	Open circuits and closed circuits may be	Students will be able to compare and	Unit F Ch. 2 Lesson 3		force
	compared and contrasted.	contrast open and closed circuits.	F60-61 Science and Technology		
	Coning and a smalled singuistic arrows to a second		F54-55 Investigate		frequency
3.2.4.B4	Series and parallel circuits may be compared		F63 Activities for Home and School: Marbles on Ramp		ala a a di atau ata
	and contrasted.	contrast series and parallel circuits.	Unit E Ch. 2 Lesson 2	AC 00 100	closed circuit
	Design and construct simula	Cturdonto will be able to recoming		AG 99-100 Performance	anan airawit
3.2.4.B4	Design and construct simple	Students will be able to recognize,	E76-77 Investigate E79 Investigateion Challenge: Observe Loudness	Performance	open circuit
	series and parallel circuits.	illustrate, and build series and parallel circuits.	District Materials: "Groovy Guitars"		madal
		parallel circuits.	District Materials. Groovy Guitars		model
3.2.4.B4	Electric charges flowing through a wire	Students will be able to build an	Unit E Ch. 3 Lesson 3		resistance
	can produc a measurable force on	electromagnet.	E85 Investigation Challenge: Observing Sound		resistance
	magnets and other objects.	electromagnet.	Absorption		velocity
	magnets and other objects.		· ·		velocity
3.2.4.B6	Electric circuits may produce or use	Students will be able to identify variou	Unit E Ch. 4 Lesson 1		wavelength
	light, heat, sound, and magnetic energy.	energy forms produced by electric			
		circuits.			pitch
3.2.4.B5	Vibrating objects make sound, and sound	Students will be able to identify various			reflect
3.2.4.B5 3.2.5.B5	can make things vibrate; the bigger the	characteristics of sound (pitch,			Terrect
3.2.3.03	vibration the louder the sound; the faster	loudness, reflection).			refract
	the vibration, the louderr the pitch.				
	and the proof.				

Grade 4 Physical Science

	Physical Science				
Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
3.2.4.B4	Magnets have poles that repel and attract each other.	Students will be able to use a magnet to classify objects as magnetic or not			absorb
3.2.4.B4	Magnets attract certain kinds of kinds of materials.	magnetic.			gravity friction
CC.1.2.4.B	Scientists refer to details and examples in		District Materials: "Conserving for the Future"		series circuit
	text to support what the text says explicitly and make inferences.		Renewable and Non-Renewable Activity Guide: "It Won't Last Forever" pages 36-38		parallel circuit
	Scientists integrate information from two	Students will be able to measure,			gravity
CC.1.2.4.I	sources on the same topic to demonstrate	describe, or classify objects and/or			friction
	understanding of that topic.	materials by basic characteristics.			series circuit
	Scientists distinguish between scientific fact and opinion.				parallel circuit
	Scientists use data/evidence to construct				
	explanations and scientists develop explanations based on their evidence.				

Grade 4 Physical Science

Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
			4		
		Health Resour			
10.1.A	Your well-being is linked to		Science Text R14-15		
10.1.C	responsible, healthy habits.		HWB R12-14		
10.1.D					
	Media messages contribute		Science Text R16-17		
10.2.D	to the development of health		HWB R15-17		
10.3.A	attitudes and behaviors.				
10.3.D					
	Your safety and health are				
	influenced by how personal				
	decisions are made.				
			Recommended Time Frame: 5	6-63 days	
			Recommended Time Trume. 50-03 days		
1					

Grade 4 Earth Science

_	Earth Science				
Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
3.3.4.B1	Our solar system has planets which	Students will be able to recognize how	Unit D Ch 3 Lesson 1	PSSA Finish Line	solar system
	have basic characteristics.	Earth is different from other planets.	Process Skill Tip: D63	p. 170	
			D62-63 Investigate		galaxy
3.3.4.B1	Earth has a place in the solar system	Students will be able to compare and	D66 Earth and the Seasons (Relate Seasons to Life	District Chapter 3	
	It includes the sun (stars), moons,	contrast the rotation and revolution	in PA)	Test	lunar phases
	and planets.	of the earth.	D66 Reading Mini-Lesson: Identify Cause and Effect		
			District Materials: "Reasons for the Seasons",		model
3.3.4.B1	Explain days and seasons using	Students will be able to observe/identify	"The Changing Moon", "Modeling Moon Phases",		
	solar system motions.	a pattern in the phases of the moon and	"Eclipses of All Kinds", "Observing the Moon",		patterns
		make predictions based on those	"Mt Nose: A Model of Day and Night",		
		observations.			outer planets
3.3.4.B1	Earth's rotation causes the	Students will be able to identify basic			
3.3.4.B2					inner planets
3.3.4.62	sun, moon, stars, and planets to	cloud types (cirrus, cumulus, stratus,			talasaana
	appear to orbit the earth once	cumulonimbus)	D68-69 Investigate		telescope
	each day. (Describe, relate)				
3.3.3.B1	Observable aboves converte the	Chudanta will be able to identify besis	Unit D Ch 3 Lesson 3		rotation
3.3.4.B2	Observable changes occur to the shape of the moon over the course	Students will be able to identify basic	11 11 D Cl 21		revolution
3.3.4.52	of a month.	appropriate weather instruments and	Unit D Ch 3 Lesson 4		revolution
	or a month.	what they measure (thermometer,	D82-83 Investigate		water evelo
		rain gauge, weather vane, barometer, anemometer).	11 11 D Cl 21	D: 1 : 1 Cl	water cycle
		anemometer).	Unit D Ch 2 Lesson 1	District Chapter 2	
3.3.4.A5	Know basic weather elements and	Students will be able to communicate	D33 Process Skill Tip	Test	
3.3.4.A6	what makes up weather; identify	the stages of the water cycle and identify	DAE lastifs Cham.		
3.3.4.Ab	weather patterns and how we	that it is a continuous process.	D15 Inside Story		
	measure weather.	that it is a continuous process.	D5 Process Skills Tip: Observe and Infer		
	measure weather.		WB 163		
3.3.4.A4	Describe phase changes of water on	Students will be able to identify various	District Materials: Cloud Activity		
3.3.4.A4	Earth.	systems and describe how their parts			
	Larui.	work together.			
	A system is made of parts and the	work together.			
	parts can interact.				
1	Anything on or near Earth is	Students will be able to identify gravity			
	pulled downward by the earth's	as a force and describe its effect on			
	gravity.	objects.			
	Bravity.	objects.			

Grade 4 Earth Science

Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
CC.1.4.4.V CC.1.5.4.B	Scientists conduct short research projects that build knowledge through investigation on different aspects of a science topic. Scientists may paraphrase portions of a text or information presented in diverse media and formats, including visually, quantitatively, and orally.	Students will be able to communicate (orally, written, visual, etc.) how something works.			
		Health Resour	ces/Activities		
10.1.A 10.1.B 10.1.C 10.1.D 10.1.E 10.2.A 10.2.D	The way our multiple body systems function determines our level of health. Nutritional factors such as food selection and caloric content, have a major impact on health.		Science Text R 20-23 HWB 24-28 Science Text R28-29 HWB 33-34 Science Text R 36-37 HWB 41-42 Recommended Time Frame: 23-27	days	

Grade 4 Life Science

Assessment Strand	Learning Goals/Concepts	Student Performance Objectives	Resources/Activities	Assessments	Terminology
4.1.4.C	All living things depend directly	Students will be able to identify the basic	Unit B Ch 1 Lesson 1	B4-5 Investigate	organism
3.1.4.A2	or indirectly on air, water, soil,	needs of living things.	p. B1 f Graphic Organizer	WB 358-361	
3.1.4.A5	and sun.		p. B1i-B1j: Environmental Changes and Plant		ecosystem
		Students will be able to identify living and	Growth	WB 83 Lesson Concept	
4.1.4.A	Living things depend on other	nonliving things in an ecosystem and	Process Skills Practice: Make a Model p. B5	Review:	environment
3.1.4.A2	living and nonliving things in their	communicate their roles.	Reading Mini-Lesson: Cause and Effect p. B7	What are Systems?	
3.1.4.A5	environment for basic needs/survival.		"Project Learning Tree" How Plants Grow-Activity 41, p. 179-181		watershed
4.1.4.A	The survival of living things is		Have Seeds, Will Travel-Activity 43, p.185-187		wetland
	affected by changes in the food,			Chapter 1 Test	
	water, shelter, and space		Unit B Ch 1 Lesson 2		lentic
	available to them.		B11 Process Skill Tip		
			B10-11 Investigate		lotic
4.1.4.E	Changes to ecosystems can be	Students will be able to infer how changes	B15 "The Questions Kids Ask"		
	caused by human activity or by	in an ecosystem affect the stability of	B16 Investigation Challenge		natural resources
	natural forces which may occur	the ecosystem including the survival of			
	slowly over time or rapidly.	living things.	Introduce Biological Pests and Invasives		agriculture
	Air, water, and soil pollution can	Students will be able to communicate	Unit B Ch 1 Lesson 3		agricultural
	be prevented or reduced.	causes of pollution and describe ways it	B16 Investigation Challenge: More About the		products
		can be prevented.	Interaction of Ecosystem Parts		
4.5.4.C	Human activities affect/pollute the		B19 Process Skill tip: Observe and Infer		food and fiber
4.5.4.D	environment.		B23 Investigation Challenge District Materials: Food Chain Packet		system
	Laws and regulations exist to		Project Learning Tree: p. 117 Activity 27		sustainabilty
	help protect organisms and		"Every Tree for Itself",		
	natural resources.		Activity 45 "Web of Life"		pest
		Students will be able to identify various			
	A system is made of parts and the	systems and describe how their parts			integrated
	parts interact.	work together.			pest
4244					management
4.2.4.A	A watershed is an area of land	Students will be able to explain the role	Unit B Ch 2 Lesson 1		
	from which surface runoff drains	and relationship of a watershed on water	B1 (PSSA Prep): Protecting Ecosystems	Chapter 2 Test	
	into a stream, channel, lake,	sources and identify the negative impact			invasive
	reservoir, or other body of water.	made by humans.	Unit B Ch 2 Lesson 2 B58-59 Investigate		int
4.2.4.C	Differentiate between salt water and		B59 Process Skill Tip: Compare (PSSA prep)		point source pollution
4.2.4.C			DOD Trocess Skill rip. Compare (F33A prep)		poliation
	fresh water organisms that live there.	1			

Grade 4 Life Science

Assessment Strand	Concepts		Resources/Activities	Assessments	Terminology
4.2.4.B	A wetland provides habitat for plants	Students will be able to explain the role	Unit B Ch2 lesson 3	1	non-point source
	and animals, controls flooding, and	importance of wetlands.	B66-67 Investigate		pollution
	purifies water.		B67 Process Skill tip: Communicate		
			B69 Investigation Challenge: Conserving		recycle
4.4.3.B	People depend on agriculture	Students will be able to describe the	Resources at School		
4.4.4.B	for their basic needs including	human dependence on the food and fiber			waste
	food, clothing, and shelter.	systems from production to consumption.	WOW: p. 87 "Wetland Habitats"		
					food chain
4.4.4.A	Agricultural commodities move		WOW: p. 109 "Marsh Market"		
	from production to consumption.				producer
			WOW: 212-214 "Wetlands in a Pan"		
4.4.4.B	PA has important agricultural products.	Students will be able to identify			consumer
		sagricultural products grown in PA.	District Materials: Water, Water Everywhere"		
4.3.3.B	Identify local natural resources.		Susquehanna Riverlands:		
			www.pplweb.com/susquehanna+riverlands/		
4.3.4.A	People use natural resources in	Students will be able to identify types and			
4.5.4.A	sustainable and nonsustainable	uses of earth materials for renewable,			
	ways, including for survival.	nonrenewable, and reusable products.			
4.5.4.B	The various forms of pest control may	Students will be able to identify pests and			
	be compared and contrasted.	explain how they compete with other			
	i.e.: biological, chemical, physical.	living things for resources.			
4.5.3.B	What is a pest?/Identify pests.	Students will be able to compare and			
		contrast different forms of pest control.			
CC.1.4.4.A	Scientists may write	Students will be able to apply a			
	informative/explanatory text to	scientific method to design and construct			
	examine a topic and convey ideas	a scientific investigation.			
	and information clearly.				
	Scientists publicly communicate				
	procedures and explanations so that				
	their results may be reproduced.		Recommended Time Frame: 45-58 days		1
	Scientists ask questions about the				
	work of other scientists.				
1					