4th grade Environment and Ecology Standards Alignment with Exploring Pennsylvania: Our Geography, History, Economics, and Government Program

Environment and Ecology 4th grade	Lessons in text ExPA	SAB	Supplemental Materials/TRB
Watersheds and Wetlands 4.1.4			
A. Identify various types of water environments, e.g., lotic and lentic systems	Les 2, 8	pp. 8, 10, 12, 15	
B. Explain the differences between moving and still water, identify types of precipitation	Les 2, 8	p. 8	
C. Identify living things found in water environ.			
D. Identify wetlands	Les 8	p. 15	
E. Recognize the impact of watersheds and wetlands	Les 8	pp. 10, 15	
Renewable and Nonrenewable Resources 4.2.4			
A. Identify needs of people, e.g., identify natural resources, explain water cycle, how environment meets needs of people	Les 8, 9, 11, 22	pp. 8, 14, 15, 17, 18, 21, 30, 32, 36	
B. Identify products derived from natural resources, e.g., products from trees, plants, animals, human-made products	Les 4-7, 9, 10, 13, 22	pp. 14, 16, 17, 21, 30, 32, 36	
C. identify renewable and non-renewable resources, identify ways of conserving natural resources	Chapter 3 Opener, Les 8, 11	p. 15	
D. Identify by-products and their use of natural resources. e.g., waste stream, reusable products, recycling	Les 11	p. 18	
Environmental Health 4.3.4			
A. Know that plants, animals and humans are dependent on air and water, e.g., pollution	Les 8, 11	pp. 6-7, 9, 18	
B. Identify how human actions affect environmental health, e.g., identify sources of pollution, and ways to reduce it	Les 11, 25	pp. 18, 36	
C. Understand the elements of natural systems are interdependent	Les 8, 11	pp. 6-7, 9, 15	
Agriculture and Society 4.4.4.			
A. Know the importance of agriculture to humans	Les 2, 9	pp. 14, 16	
B. Identify the role of sciences in PA agriculture, e.g., identify common plants and animals on PA farms	Les 2, 9	pp. 6-7, 9, 16	
C. Know that food and fiber originate from plants and animals, e.g., identify local and regional farm products	Les 2, 4-7	pp. 9, 14, 16	

	Lessons in text ExPA	SAB	Supplemental Material/TRB
D. Identify technology and energy use associated with agriculture	Les 9	p. 16	
Ecosystems and their Interactions 4.6.4.			
A. Understand that living things are dependent on nonliving things in the environment for survival	Les 2, 10, 13, 15, 22	pp. 6-7, 9, 14, 21	
B. Understand the concept of cycles, e.g., water cycle	Les 4, 8	pp. 9, 15	
Threatened, Endangered and Extinct Species			
4.7.4			
A. Identify difference in living things, e.g., explain why each of 4 elements in a habitat is essential for survival	Les 2	pp. 6-7, 9	X
C. Define and understand extinction	Chapter 3 Opener		
Humans and the Environment 4.8.4			
A. Identify the biological requirements of humans, e.g., identify ways humans use natural resources B. Know that environmental conditions influence	Les 4-7, 9, 10, 12, 13, 15, 21, 22, 24, 28 Les 2, 9, 15,22, 25,	pp. 14, 17, 18, 21, 30, 32, 36 pp. 14, 18,	
where and how people live e.g., natural resources influence what people use, climate	26, 28	21, 30, 32, 36	
C. Explain how human activities may change the environment	Les 11, 24, 25, 26, 28	pp. 30, 32, 33, 35, 36	
D. Know the importance of natural resources in daily life, e.g., identify items in daily life that come from natural resources, conserving, land uses in the community	Les 4-7, 9, 11, 21, 22, 24, 25, 26, 28	pp. 6-7, 9, 14, 17, 18, 21, 30, 32, 36	
Environmental Laws and Regulations 4.9.4			
A. Know that there are laws and regulations for the environment, e.g., explain recycling laws, describe role of state agencies deal with laws	Les 11, 30		