

Academy of Natural Sciences Discovery Lessons Matched to PA State Standards

PreK and K Standards				
Standard 3.1.a Living and Non-living organisms	Standard 3.1.b Genetics	Standard 3.1.c Evolution	Standard 3.3.a Earth and Space Science	Standard 4.1 Environment and Ecology

Lesson Topics

Grades PreK-2

- Animal Habitats
- Animal Senses
- Bugs to Butterflies
- Fur, Feathers, and Scales
- Meet the Dinosaurs
- Soil--It's Alive

X			X	X
X				
X	X			X
X			X	
X		X		X
X			X	X

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- Animal Habitats
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Grades 3-6

- Butterflies: From Delicate to Dazzling
- Ancient Adaptations
- Extreme Environments
- Geology Really Rocks
- Science Detectives
- Plants and Pigments

Grades 7-9

- Design your Own Experiment
- Keys, Trees, and Clades

Grade 10-12

- Seeing Eye to Eye

PA State Standards for Science and Technology and Engineering Education	Biological Sciences			Physical Sciences: Chemistry and Physics		Earth and Space Sciences	Technology and Engineering Education
	3.1 A Organisms and Cells	3.1.B Genetics	3.1.C Evolution	3.2.A Chemistry	3.2.B Physics	3.3.A Earth Structures	3.4
	X		X				
	X		X				
	X						
	X		X				
	X		X			X	
	X					X	
	X		X				
	X		X			X	
	X		X				
						X	
	X						
	X			X			
	X						
	X	X	X				
	X		X		X		X

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PA State Standards For Environment and Ecology	Ecology	Natural Resources	Agriculture and Society
	4.1	4.3	4.4
	X		
	X		
	X		
	X		
	X		
	X		X
	X		
	X		
	X		
		X	
	X		
	X		X
	X		
	X		
	X		

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Pa State Standards For Reading, Writing, Speaking and Listening	Learning to Read Independently	Types of Writing	Speaking and Listening
	1.1	1.4	1.6
Lesson Topics			
Grades PreK-2			
Animal Habitats			X
Animal Senses			X
Bugs to Butterflies	X		X
Fur, Feathers, and Scales			X
Meet the Dinosaurs			X
Soil--It's Alive			X
Grades 3-6			
Butterflies: From Delicate to Dazzling			X
Ancient Adaptations			X
Extreme Environments			X
Geology Really Rocks			X
Science Detectives	X	X	X
Plants and Pigments			X
Grades 7-9			
Design your Own Experiment	X	X	X
Keys, Trees, and Clades		X	X
Grade 10-12			
Seeing Eye to Eye			X

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PA State Standards For Mathematics	Measurement and Estimation	Mathematical Reasoning	Mathematical Problem Solving	Statistics and Data Anaylsis	Probability and Predictions
The problems are challenging and puzzling	2.3	2.4	2.5	2.6	2.7
	X				
	X		X		
	X		X	X	
		X	X		X
	X				