

Project WET Correlations to the Biology Core Curriculum

PEOPLE OF THE BOG – Pg 89

Standard I Objective 2 a
Standard I Objective 3 b, d
Standard V Objective 1 b

WHOSE PROBLEM IS IT? – Pg 429

Standard I Objective 2 b
Standard I Objective 3 e

NATURE RULES! – Pg 262

Standard I Objective 2 c

WATER: READ ALL ABOUT IT – Pg 400

Standard I Objective 2 c

A GRAVE MISTAKE – PG 311

Standard I Objective 2 d

THE PUCKER EFFECT – Pg 338

Standard I Objective 2 d

SPARKLING WATER – Pg 348

Standard I Objective 2 d

SUPERBOWL SURGE – Pg 353

Standard I Objective 2 d

LIFE IN THE FAST LANE – Pg 79

Standard I Objective 3 c

No Correlations for Standards II, III and IV

<p>Standard I: Students will understand that living organisms interact with one another and their environment.</p>	<p>Objective 1: Summarize how energy flows through an ecosystem.</p>	a. Arrange components of a food chain according to energy flow.	
		b. Compare the quantity of energy in steps of an energy pyramid.	
		c. Describe strategies used by organisms to balance the energy expended to obtain food to the energy gained from the food.	
		d. Compare the relative energy output expended by an organisms in obtaining food to the energy gained from the food.	
		e. Research food production in various parts of the world.	
	<p>Objective 2: Explain relationships between matter cycles and organisms.</p>	a. Use diagrams to trace the movement of matter through a cycle in a variety of biological communities and ecosystems.	People of the Bog – Pg 89
		b. Explain how water is a limiting factor in various ecosystems.	Whose Problem is It? – Pg 429
		c. Distinguish between inference and evidence in a newspaper, magazine, journal, or Internet article that addresses an issue related to human impact on cycles of matter in a ecosystem and determine the bias in the article.	Nature Rules! – Pg 262 Water: Read all About It! – Pg 400
		d. Evaluate the impact of personal choices in relation to the cycling of matter within an ecosystem.	A Grave Mistake – Pg 311 The Pucker Effect – Pg 338 Sparkling Water – Pg 348 Super Bowl Surge – Pg 353
	<p>Objective 3: Describe how interactions among organisms and their environment help shape ecosystems.</p>	a. Categorize relationships among living things according to predator-prey, competition, and symbiosis.	
		b. Formulate and test a hypothesis specific to the effect of changing one variable upon another in a small ecosystem.	People of the Bog – Pg 89
		c. Use data to interpret interactions among biotic and abiotic factors within an ecosystem.	Life in the Fast Lane – Pg 79
		d. Investigate an ecosystem using methods of science to gather quantitative and qualitative data that describes the ecosystems in detail.	People of the Bog – Pg 90
		e. Research and evaluate local and global practices that affect ecosystems.	Whose Problem is it? – Pg 429

<p>Standard V: Students will understand that biological diversity is a result of evolutionary processes.</p>	<p>Objective 1: Relate principles of evolution to biological diversity.</p>	a. Describe the effects of environmental factors on natural selection.	<p>The People of the Bog – Pg 89</p>
		b. Relate genetic variability to a species’ potential for adaptation to a changing environment.	
		c. Relate reproductive isolation to speciation.	
		d. Compare selective breeding to natural selection and relate the differences to agricultural practices.	
	<p>Objective 2: Cite evidence for changes in populations over time and use concepts of evolution to explain these changes.</p>	a. Cite evidence that supports biological evolution over time.	
		b. Identify the role of mutation and recombination in evolution.	
		c. Relate the nature of science to the historical development of the theory of evolution.	
		d. Distinguish between observations and inferences in making interpretations related to evolution.	
		e. Review a scientific article and identify the research methods used to gather evidence that documents the evolution of a species.	
	<p>Objective 3: Classify organisms into a hierarchy of groups based on similarities that reflect their evolutionary relationships.</p>	a. Classify organisms using a classification tool such as a key or field guide.	
		b. Generalize criteria used for classification of organisms.	
		c. Explain how evolutionary relationships are related to classification systems.	
		d. Justify the ongoing changes to classification schemes used in biology.	

