WONDERS OF WETLANDS

ACTIVITY MATRIX

ACTIVITY	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	Other Standards
Introducing Wetlands	4.D 7.D							7.A			4.A 4.B							1.2.5.A 1.4.5.B 1.8.5.B 7.4.6.A 9.1.5.B
Let the Cattail Out of the Bag!	4.D										4.B							
Wetlands in the Classroom!	4.D 7.D		4.C			4.A	7.A					7.A						1.6.5.C 9.l.5.B
Wetlands Metaphors	7.D 10. D																	1.6.8.D
Wetlands Habitats	7.D									7.C								1.1.8.D
Wetlands Weirdos						7.A	7.A 7.B				7.B	7.A						1.1.8.G
Whose Clues?						4.A					4.A 4.C							
Marsh Market		7.A	7.			7.A	7.B 7.			7.E	7.B							
Wet n' Wild	4.C 4.D					4.A	4.A					4.A						7.1.3.A 9.1.5.B
The Wetland Gourmet	7.B	7.A																
Marsh Mystery			7.A 7.B					7.D			7.B 7.D							1.1.8.G 10.2.6.E
Treatment Plants	7.D 7.E										7.B							
This Plant Key is All Wet	7.D									7.C		7.A						1.1.8.G
Wetland Wheel	7.D									7.C								9.1.8.B
Tracking Plants and Keeping Track	7.D					7.C	7.A			7.C								2.6.8.D
Run for the Border	7.D					7.A	7.A	7.D		7.C	7.A 7.B							
Wetland Address	7.D					7.A	7.A					7.A 7.D						1.1.5.G 1.1.8.G

																		7.1.6.B
Life in the Fast Lane	7.D 7.E					7.A 7.C					7.A 7.B	7.A				7.B		1.4.8.B 2.3.5.B
A Drop in the Bucket		4.A 7.C						7.A						4.D				2.2.8.B 2.3.5.A,B.D 2.4.3.A,B 7.2.6.A
Soak It Up!	7.B 7.D 7.E									7.B	7.B							7.2.6.B
Salt Marsh Players	7.C 7.D					7.A	7.A					7.A		7.D				1.1.5.G,H 1.4.5.A 9.1.5.B
Water We Have Here?	10. E 12. C		10. B								10. A 10. D					10. B		
Nutrients: Nutrition or Nuisance?	7.B 7.D					4.A		4.C				4.A						
Marsh Munchies		7.B				7.A												2.2.5.A 10.1.6.C 11.3.6.E
Recipe for Trouble	7.D		7.B				7.B	7.D			7.B			7.D				
Water Under Foot	10. B 10. D		10. B 12. A							10. B	10. D			10. D				
Runoff Race	10. B 10. D		10. B							10. B				10. D				
Wetland in a Pan	10. B 10. D									10. B				10. D				
Water Purifiers	10. B 10. D		10. A							10. B	10. B			10. D				2.2.11.A
Over Hill and Dale	7.B 10. B 10.													10. A	10. D			7.1.6.A 7.2.6.A 7.1.9.A 7.1.9.B

	E																	
Nature's Recyclers						4.A 7.A								4.A				
Do You Dig Wetland Soil?	7.B 7.D			7.B		7.A				7.C	7.B			4.B				
How Thirsty is the Ground?	7.B 7.D			7.B							7.B							2.2.8.B 2.3.8.B
A Rottin Experiment	7.D	7.D		7.C		7.A				7.B	7.B							2.6.5.A
Nature's Filter	7.D 7.E										7.B							
Hear Ye! Hear Ye!	10. E							10. C	10. A									1.6.8.A,D 5.2.9.C 9.1.8.B
Hydropoly	10. E		7.B					7.D 10. C										
People of the Bog	7.D	7.D				7.A				7.B	7.B							
Regulation Rummy									10. A 12. A									5.3.9.D
What a Boat!	4.D	4.A						4.D		4.B	4.D							7.3.3.B 9.1.3.B
Chrysti the Wordsmith on Wetlands	7.D																	1.7.8.A 1.8.8.B 7.3.9.B
Wetland Tradeoffs	10. D 12. E					12. C		10. C			12. D							1.6.11.D 1.8.11.B 5.2.12.C 6.3.12.B
Helping Wetland Habitats	12. E					12. C		10. C			12. D						10. B	1.4.8.B 1.4.11.B

Standard(s): Environment and Ecology: 4.1.4.D
4.1.7.D, 4.8.7.A
Science and Technology: 3.2.4.A, 3.2.4.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Introducing Wetlands (Multiple activities – Education Standards, Teaching Strategies, and Multiple Intelligences vary)	*Watersheds and Wetlands* 4.1.4.D ▪ Identify different kinds of wetlands. ▪ Identify plants and animals found in wetlands. 4.1.7.D ▪ Recognize the common types of plants and animals. ▪ Describe different types of wetlands. *Humans and the Environment* 4.8.7.A ▪ Compare and contrast how people use natural resources throughout the world.	*Inquiry and Design* 3.2.4.A ▪ Distinguish between a scientific fact and a belief. ▪ Relate how new information can change existing perceptions. 3.2.4.B ▪ Recognize observational descriptors from each of the five senses.	Geography *The Interactions Between People and Places* 7.4.6.A Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre, and Visual Arts* 9.1.5.B Reading, Writing, Speaking and Listening *Reading Critically in All Content Areas* 1.2.5.A. *Types of Writing* 1.4.5.B. *Research* 1.8.5.B	Art Form Brainstorm Discovery Hands-on Listening Observation Research Sensory Writing	Verbal/Linguistic Logical/Mathematical Visual/Spatial Musical/Rhythmic Naturalist Interpersonal Intrapersonal	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.4.C
Science and Technology: 3.2.4.B

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
Let the Cattail Out of the Bag!	*Watersheds and Wetlands* 4.1.4.D ▪ Identify different kinds of wetlands. ▪ Identify plants and animals found in wetlands.	*Inquiry and Design* 3.2.4.B ▪ Recognize observational descriptors from each of the five senses. ▪ Use observations to develop a descriptive vocabulary.		Hands-on Observation Sensory	Verbal/Linguistic Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.4.D, 4.3.4.C, 4.6.4.A
4.1.7.D, 4.7.7.A
Science and Technology: 3.3.7.A

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetlands in the Classroom!	*Watersheds and Wetlands* 4.1.4.D ▪ Identify different kinds of wetlands. ▪ Identify plants and animals found in wetlands. ▪ Explain wetlands as habitats for plants and animals. 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the common types of plants and animals. ▪ Describe different types of wetlands. *Environmental Health* 4.3.4.C ▪ Identify some of the organisms that live together in an ecosystem. *Ecosystems and their Interactions* 4.6.4.A ▪ Identify a simple ecosystem and its living and nonliving components. *Threatened, Endangered*	*Biological Science* 3.3.7.A ▪ Describe how the structures of living things help them function in unique ways. ▪ Account for adaptations among organisms that live in a particular environment.	Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre, and Visual Arts* 9.1.5.B Reading, Writing, Speaking and Listening *Speaking and Listening* 1.6.5.C	Art Form Hands-on Research Model	Verbal/Linguistic Visual/Spatial Naturalist	

	and Extinct Species 4.7.7.A ▪ Select and ecosystem and describe different plants and animals that live there.					

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D
4.1.10.D

Science and Technology:

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
Wetland Metaphors	*Watersheds and Wetlands* 4.1.7.D ▪ Describe the different functions of a wetland. 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g. habitat, flood, buffer zones, prevention areas, nurseries, food production areas).		Reading, Writing, Speaking and Listening *Speaking and Listening* 1.6.8.D	Classification Simulation Small group	Verbal/Linguistic Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D
Science and Technology: 3.1.7.C

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
Wetland Habitats	*Watersheds and Wetlands* 4.1.7.D ▪ Describe different types of wetlands. ▪ Identify specific characteristics of wetland plants and soils.	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. ▪ Identify repeating structure patterns.	Reading, Writing, Speaking and Listening *Learning to Read Independently* 1.1.8.D	Analyzing Classification Comparison Identification Reading	Verbal/Linguistic Logical/Mathematical Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.6.7.A, 4.7.7.A, 4.7.7.B
Science and Technology: 3.2.7.B, 3.3.7.A

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetland Weirdos	*Ecosystems and their Interactions* 4.6.7.A ▪ Describe and explain the adaptations of plants and animals to their environment. *Threatened, Endangered and Extinct Species* 4.7.7.A ▪ Identify adaptations in plants and animals. 4.7.7.B ▪ Explain how an adaptation is an inherited structure or behavior that helps and organism survive and reproduce.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. *Biological Sciences* 3.3.7.A ▪ Describe how the structures of living things help them function in unique ways. ▪ Account for adaptations among organisms that live in a particular environment.	Reading, Writing, Speaking and Listening *Learning to Read Independently* 1.1.8.G	Data collection Hands-on Investigation Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.4.C, 4.1.4.D, 4.6.4.A, 4.7.4.A
Science and Technology: 3.3.4.A

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wet 'n' Wild	*Watersheds and Wetlands* 4.1.4.C ▪ Identify fish, insects and amphibians that are found in fresh water. 4.1.4.D ▪ Identify plants and animals found in wetlands. ▪ Explain wetlands as habitats for plants and animals. *Ecosystems and their Interactions* 4.6.4.A ▪ Identify plants and animals with their habitat and food sources. ▪ Identify a local ecosystem and its living and nonliving components. *Threatened, Endangered and Extinct Species* 4.7.4.A ▪ Explain why plants and animals are different colors, shapes and sizes and how these differences relate to their survival. ▪ Explain why each of the four elements in a habitat is essential for survival.	*Biological Sciences* 3.3.4.A ▪ Know that some organisms have similar external characteristics and that similarities and differences are related to environmental habitat. ▪ Describe the basic needs of plants and animals.	Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre, and Visual Arts* 9.1.5.B Geography *Basic Geographic Literacy* 7.1.3.A	Classification Data collection Hands-on Identification Investigation	Verbal/Linguistic Visual/Spatial Naturalist	

	▪ Identify local plants or animals and describe their habitat.					

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.6.4.A
Science and Technology: 3.2.4.A

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Whose Clues?	*Ecosystems and their Interactions* 4.6.4.A ▪ Identify plants and animals with their habitat and food sources. ▪ Identify a local ecosystem and its living and nonliving components.	*Inquiry and Design* 3.2.4.A ▪ Provide clear explanations that account for observations and results. 3.2.4.C ▪ Generate questions about objects, organisms and/or events that can be answered through scientific investigations. ▪ Design an investigation.		Brainstorm Discovery Hands-on Investigation Identification	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.2.7.A, 4.3.7.C, 4.6.7.A, 4.7.7.B, 4.7.7.C
Science and Technology: 3.1.7.E, 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Marsh Market	*Renewable and Nonrenewable Resources* 4.2.7.A ▪ Explain how plants and animals may be classified as natural resources. ▪ Compare means of growing or acquiring food. *Environmental Health* 4.3.7.C ▪ Explain the complex, interactive relationships among members of an ecosystem. *Ecosystems and their Interactions* 4.6.7.A ▪ Explain energy flow through a food web. ▪ Identify niches for producers, consumers and decomposers within an ecosystem. *Threatened, Endangered and Extinct Species* 4.7.7.B ▪ Explain how living things respond to changes in their environment. 4.7.7.C ▪ Identify natural or	*Unifying Themes* 3.1.7.E ▪ Describe the effect of making a change in one part of a system on the system as a whole. *Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions.		Classification Simulation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

	human impacts that cause habitat loss. ▪ Explain how habitat loss can affect the interaction among species and the population of a species.					

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.B, 4.2.7.A
Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
The Wetland Gourmet	*Watersheds and Wetlands* 4.1.7.B ▪ Recognize the common types of plants and animals. ▪ Describe the different functions of a wetland. *Renewable and Nonrenewable Resources* 4.2.7.A ▪ Identify resources used to provide humans with energy, food, housing, and water. ▪ Compare means of growing or acquiring food.			Discussion Hands-on	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.3.7.A, 4.3.7.B, 4.8.7.D
Science and Technology: 3.2.7.B, 3.2.7.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Marsh Mystery	*Environmental Health* 4.3.7.A ▪ Describe different types of pest controls and their effects on environmental health. 4.3.7.B ▪ Identify land use practices and their relation to environmental health. *Humans and the Environment* 4.8.7.D ▪ Explain how human activities and natural events have affected ecosystems.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. 3.2.7.D ▪ Define different types of problems. ▪ Propose the best solution.	Reading, Writing, Speaking and Listening *Learning to Read Independently* 1.1.8.G Health, Safety and Physical Education *Healthful Living* 10.2.6.E	Discussion Problem Solving Reading Role Playing	Verbal/Linguistic Logical/Mathematical Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.1.7.E
Science and Technology: 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Treatment Plants	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Describe the different functions of a wetland. 4.1.7.E ▪ Explain the impact of watersheds and wetlands in flood control, wildlife habitats and pollution abatement.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions.		Demonstration Discussion	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D
Science and Technology: 3.1.7.C, 3.3.7.A

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
This Plant Key Is All Wet	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the common types of plants and animals.	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. ▪ Identify repeating structure patterns. *Biological Sciences* 3.3.7.A ▪ Explain how to use a dichotomous key to identify plants and animals.	Reading, Writing, Speaking and Listening *Learning to Read Independently*	Classification Identification Observation	Verbal/Linguistic Logical/Mathematical Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D
Science and Technology: 3.1.7.C

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetland Wheel	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the common types of plants and animals.	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. ▪ Identify repeating structure patterns.	Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre, and Visual Arts* 9.1.8.B	Classification Hands-on Identification Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.6.7.C, 4.7.7.A
Science and Technology: 3.1.7.C

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Tracking Plants and Keeping Track	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the common types of plants and animals. *Ecosystems and their Interactions* 4.6.7.C ▪ Explain how ecosystems change. *Threatened, Endangered and Extinct Species* 4.7.7.A ▪ Select an ecosystem and describe different plants and animals that live there. ▪ Understand levels of ecosystem organization (e.g., individuals, populations, species).	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. ▪ Identify repeating structure patterns.	Mathematics *Statistics and Data Analysis* 2.6.8.D	Classification Data Collection Hands-on Identification Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.6.7.A, 4.7.7.A, 4.8.7.D
Science and Technology: 3.1.7.C, 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Run for the Border	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the common types of plants and animals. *Ecosystems and their Interactions* 4.6.7.A ▪ Demonstrate the dependency of living components in the ecosystem on the nonliving components. ▪ Explain energy flow through a foodweb. *Threatened, Endangered and Extinct Species* 4.7.7.A ▪ Select an ecosystem and describe different plants and animals that live there. *Humans and the Environment* 4.8.7.D ▪ Explain how human activities and natural events have affected ecosystems.	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. ▪ Identify repeating structure patterns *Inquiry and Design* 3.2.7.A ▪ Answer "What if" questions based on observation, inference or prior knowledge or experience. 3.2.7.B ▪ Describe relationships by making inferences and predictions.		Classification Data Collection Hands-on Investigation Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.6.7.A, 4.7.7.A
Science and Technology: 3.3.7.A, 3.3.7.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetland Address	*Watersheds and Wetlands* 4.1.7.D ▪ Recognize the common types of plants and animals. ▪ Describe different types of wetlands. *Ecosystems and their Interactions* 4.6.7.A ▪ Describe and explain the adaptations of plants and animals to their environment. *Threatened, Endangered and Extinct Species* 4.7.7.A ▪ Select an ecosystem and describe different plants and animals that live there. ▪ Identify adaptations in plants and animals.	*Biological Sciences* 3.3.7.A ▪ Describe how the structures of living things help them function in unique ways. ▪ Account for adaptations among organisms that live in a particular environment. 3.3.7.D ▪ Identify adaptations that allow organisms to survive in their environment.	Reading, Writing, Speaking and Listening *Learning to Read Independently* 1.1.5.G, 1.1.8.G *Research* 1.8.5.C Geography *Basic Geographic Literacy* 7.1.6.B	Gaming Identification Reading Research	Verbal/Linguistic Logical/Mathematical Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.1.7.E, 4.6.7.A, 4.6.7.C
Science and Technology: 3.2.7.A, 3.2.7.B, 3.3.7.A, 3.7.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Life in the Fast Lane	*Watersheds and Wetlands* 4.1.7.D ▪ Describe different types of wetlands. 4.1.7.E ▪ Explain the impact of watersheds and wetlands in flood control, wildlife habitats, and pollution abatement. *Ecosystems and their Interactions* 4.6.7.A ▪ Describe and explain the adaptations of plants and animals to their environment. ▪ Demonstrate the dependency of living components in the ecosystem on the nonliving components. ▪ Explain the importance of the predator/prey relationship and how it maintains the balances within ecosystems. ▪ Understand limiting factors and predict their effects on an organism. 4.6.7.C ▪ Explain how ecosystems change.	*Inquiry and Design* 3.2.7.A ▪ Answer "What if" questions based on observation, inference or prior knowledge or experience. 3.2.7.B ▪ Describe relationships by making inferences and predictions. *Biological Sciences* 3.3.7.A ▪ Account for adaptations among organisms that live in a particular environment. *Technological Devices* 3.7.7.B ▪ Select appropriate instruments to measure the size, weight, shape and temperature of living and non-living objects. ▪ Apply knowledge of different measurement systems to measure and record objects' properties.	Mathematics *Measurement and Estimation* 2.3.5.B Reading, Writing, Speaking and Listening *Types of Writing* 1.4.8.B	Calculation Data Collection Gaming Hands-on Investigation Observation Role Playing	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.2.4.A
4.2.7.C, 4.8.7.A
Science and Technology: 3.5.4.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
A Drop in the Bucket	*Renewable and Nonrenewable Resources* 4.2.4.A **(K-2 Option)** ▪ Identify how the environment provides for the needs of people. 4.2.7.C ▪ Distinguish between readily available and less accessible resources. *Humans and the Environment* 4.8.7.A ▪ Locate and identify natural resources in different parts of the world.	*Earth Sciences* 3.5.4.D **(K-2 Option)** ▪ Know that approximately three-fourths of the earth is covered by water.	Mathematics *Computation and Estimation* 2.2.8.B *Measurement and Estimation* 2.3.5.A, 2.3.5.B 2.3.8.D *Mathematical Reasoning and Connections* 2.4.3.A **(K-2 Option)** 2.4.5.B Geography *The Physical Characteristics of Places and Regions* 7.2.6.A	Calculation Demonstration	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.B, 4.1.7.D, 4.1.7.E
Science and Technology: 3.1.7.B, 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Soak It Up!	*Watersheds and Wetlands* 4.1.7.B ▪ Explain factors that affect water quality and flow through a watershed. 4.1.7.D ▪ Describe the different functions of a wetland. 4.1.7.E ▪ Explain the influence of flooding on wetlands.	*Unifying Themes* 3.1.7.B ▪ Apply models to predict specific results and observations (e.g., population growth, effects of infectious organisms). *Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions.	Geography *The Physical Characteristics of Places and Regions* 7.2.6.B	Demonstration Model	Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.C, 4.1.7.D, 4.6.7.A, 4.7.7.A
Science and Technology: 3.3.7.A, 3.5.7.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Salt Marsh Players	*Watersheds and Wetlands* 4.1.7.C ▪ Explain how the physical components of aquatic systems influence the organisms that live there in terms of size, shape and physical adaptations. 4.1.7.D ▪ Recognize the common types of plants and animals. ▪ Describe different types of wetlands. *Ecosystems and their Interactions* 4.6.7.A ▪ Describe and explain the adaptations of plants and animals to their environment. ▪ Demonstrate the dependency of living components in the ecosystem on the nonliving components. ▪ Identify the relationship of abiotic and biotic components and explain their interaction in an ecosystem. *Threatened, Endangered and Extinct Species*	*Biological Sciences* 3.3.7.A ▪ Account for adaptations among organisms that live in a particular environment. *Earth Sciences* 3.5.7.D ▪ Compare the effect of water type and the life contained in them. ▪ Identify ocean and shoreline features (e.g., bays, inlets, spit, tidal marshes).	Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts* 9.1.5.B Reading, Writing, Speaking and Listening *Types of Writing* 1.4.5.A *Learning to Read Independently* 1.1.5.G, 1.1.5.H	Reading Role Playing Writing	Verbal/Linguistic Visual/Spatial Musical/Rhythmic Naturalist	

	4.7.7.A ▪ Select an ecosystem and describe different plants and animals that live there. ▪ Identify adaptations in plants and animals.					

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.E, 4.3.10.B
4.1.12.C
Science and Technology: 3.2.10.A, 3.5.10.D, 3.7.10.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Water We Have Here?	*Watersheds and Wetlands* 4.1.12.C ▪ Interpret physical, chemical and biological data as a means of assessing the environmental quality of a watershed. 4.1.10.E ▪ Describe how natural events affect a watershed. ▪ Identify the effects of humans and human events on watersheds. *Environmental Health* 4.3.10.B ▪ Explain how human practices affect the quality of the water and soil.	*Inquiry and Design* 3.2.10.A ▪ Describe materials using precise quantitative and qualitative skills based on observations. ▪ Use process skills to make inferences and predictions using collected information and to communicate, using space/time relationships, defining operationally. *Earth Sciences* 3.5.10.D ▪ Relate aquatic life to water conditions (e.g., turbidity, temperature, salinity, dissolved oxygen, nitrogen levels, pressure). ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).		Analysis Data Collection Hands On Investigation Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

		Technological Devices 3.7.10.B ▪ Describe and use appropriate instruments to gather and analyze data.				

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.6.4.A, 4.8.4.C
4.1.7.B, 4.1.7.D
Science and Technology: 3.3.4.A

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
Nutrients: Nutrition or Nuisance?	*Watersheds and Wetlands* **Older students option** 4.1.7.B ▪ Explain factors that affect water quality and flow through a watershed. 4.1.7.D ▪ Describe the different functions of a wetland. *Ecosystems and their Interactions* 4.6.4.A ▪ Identify basic needs of a plant and an animal and explain how their needs are met. ▪ Identify environmental variables that affect plant growth. *Humans and the Environment* 4.8.4.C ▪ Identify everyday human activities and how they affect the environment.	*Biological Sciences* 3.3.4.A ▪ Identify life processes of living things (e.g. growth, digestion, react to environment). ▪ Describe basic needs of plants and animals.	Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts* 9.1.3.B	Gaming Role Playing	Verbal/Linguistic Musical/Rhythmic Bodily/Kinesthetic	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.2.7.B, 4.6.7.A
Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Marsh Munchies	*Renewable and Nonrenewable Resources* 4.2.7.B ▪ Determine how consumption may impact the availability of resources. *Ecosystems and their Interactions* 4.6.7.A ▪ Understand limiting factors and predict their effects on an organism.		Family and Consumer Sciences *Food Science and Nutrition* 11.3.6.E Health, Safety & Physical Education *Concepts of Health* 10.1.6.C Mathematics *Computation and Estimation* 2.2.5.A	Calculation Discussion Gaming Role Playing	Verbal/Linguistic Logical/Mathematical Bodily/Kinesthetic Naturalist Interpersonal	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.3.7.B, 4.7..7.B, 4.8.7.D
Science and Technology: 3.2.7.B, 3.5.7.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Recipe for Trouble	*Watersheds and Wetlands* 4.1.7.D ▪ Describe the different functions of a wetland. *Environmental Health* 4.3.7.B ▪ Identify residential and industrial sources of pollution and their effects on environmental health. ▪ Explain the difference between point and nonpoint source pollution. *Threatened, Endangered and Extinct Species* 4.7.7.B ▪ Explain how living things respond to changes in their environment. ▪ Explain how one species may survive an environmental change while another might not. *Humans and the Environment* 4.8.7.D Explain how human activities and natural events have affected ecosystems.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. ▪ Design controlled experiments, recognize variables, and manipulate variables. ▪ Interpret data, formulate models, design models, and produce solutions. *Earth Sciences* 3.5.7.D ▪ Compare the effect of water type (e.g., polluted, fresh, salt water) and the life contained in them.		Classification Data Collection Experiment Problem Solving	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.B, 4.1.10.D, 4.3.10.B
4.3.12.A
Science and Technology: 3.1.10.B, 3.2.10.D, 3.5.10.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Water Under Foot	*Watersheds and Wetlands* 4.1.10.B ▪ Describe factors that affect the quality of groundwater. 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g., habitat, flood, buffer zones, prevention areas, nurseries, food production areas). ▪ Explain how a wetland influences water quality, wildlife and water retention. *Environmental Health* 4.3.10.B ▪ Explain how human practices affect the quality of the water and soil. 4.3.12.A ▪ Explain the different disposal methods used for toxic and hazardous waste.	*Unifying Themes* 3.1.10.B ▪ Examine the advantages of using models to demonstrate processes and outcomes. *Inquiry and Design* 3.2.10.D ▪ Examine the problem, rank all necessary information and all questions that must be answered. ▪ Propose and analyze a solution. *Earth Sciences* 3.5.10.D ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).		Demonstration Model Observation Problem Solving	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.B, 4.1.10.D, 4.3.10.B
Science and Technology: 3.5.10.B, 3.5.10.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Runoff Race	*Watersheds and Wetlands* 4.1.10.B ▪ Explain how vegetation affects storm water runoff. ▪ Explain how the speed of water and vegetation cover relates to erosion. 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g., habitat, flood, buffer zones, prevention areas, nurseries, food production areas). ▪ Explain how a wetland influences water quality, wildlife and water retention. *Environmental Health* 4.3.10.B ▪ Explain how human practices affect the quality of the water and soil.	*Unifying Themes* 3.1.10.B ▪ Examine the advantages of using models to demonstrate processes and outcomes. *Earth Sciences* 3.5.10.D ▪ Relate aquatic life to conditions (e.g. turbidity, temperature, salinity, dissolve oxygen, nitrogen levels, pressure). ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).		Demonstration Discussion Model Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.B, 4.1.10.D
Science and Technology: 3.1.10.B, 3.5.10.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetland in a Pan	*Watersheds and Wetlands* 4.1.10.B ▪ Explain how vegetation affects storm water runoff. ▪ Explain how the speed of water and vegetation cover relates to erosion. 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g., habitat, flood, buffer zones, prevention areas, nurseries, food production areas). ▪ Explain how a wetland influences water quality, wildlife and water retention.	*Unifying Themes* 3.1.10.B ▪ Examine the advantages of using models to demonstrate processes and outcomes. *Earth Sciences* 3.5.10.D ▪ Relate aquatic life to conditions (e.g. turbidity, temperature, salinity, dissolve oxygen, nitrogen levels, pressure). ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).		Demonstration Discussion Model Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.B, 4.1.10.D, 4.3.10.A
Science and Technology: 3.1.10.B, 3.2.10.B, 3.5.10.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Water Purifiers	*Watersheds and Wetlands* 4.1.10.B ▪ Explain how vegetation affects storm water runoff. 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g., habitat, flood, buffer zones, prevention areas, nurseries, food production areas). ▪ Explain how a wetland influences water quality, wildlife and water retention. *Environmental Health* 4.3.10.A ▪ Explain the costs and benefits of cleaning up contaminants.	*Unifying Themes* 3.1.10.B ▪ Examine the advantages of using models to demonstrate processes and outcomes. *Inquiry and Design* 3.2.10.B ▪ Describe materials using precise quantitative and qualitative skills based on observations. ▪ Use process skills to make inferences and predictions using collected information and to communicate using space/time relationships, defining operationally. *Earth Sciences* 3.5.10.D ▪ Identify the components of a municipal/agricultural water supply system and a wastewater treatment system. ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).	Mathematics *Computation and Estimation* 2.2.11.A	Comparison Demonstration Investigation Model Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.B
4.1.10.B, 4.1.10.E
Science and Technology: 3.5.10.A, 3.5.10.D

Name of Activity	**Environment & Ecology Standards Content**	**Science & Technology Standards Content**	**Other Standards Addressed**	**Teaching Strategies**	**Multiple Intelligences**	**Assessment Ideas (Teacher generated)**
Over Hill and Dale	*Watersheds and Wetlands* 4.1.7.B ▪ Identify and explain what determines the boundaries of a watershed. ▪ Explain factors that affect water quality and flow through a watershed. 4.1.10.B ▪ Describe how topography influences streams. 4.1.10.E ▪ Identify the effects of humans and human events on watersheds.	*Earth Sciences* 3.5.10.A ▪ Interpret topographic maps to identify and describe significant geologic history/structures in Pennsylvania. 3.5.10.D ▪ Assess the natural and man-made factors that affect the availability of clean water (e.g., rock and mineral deposits, man-made pollution).	Geography *Basic Geographic Literacy* 7.1.6.A, 7.2.6.A 7.1.9.A, 7.1.9.B	Demonstration Investigation Mapping Model Observation Problem Solving Small Group	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.6.4.A
4.6.7.A
Science and Technology: 3.5.4.A

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Nature's Recyclers	*Ecosystems and their Interactions* 4.6.4.A ▪ Describe how animals interact with plants to meet their needs for shelter. ▪ Describe how certain insects interact with soil for their needs. ▪ Identify a simple ecosystem and its living and nonliving components. ▪ Identify common soil textures. ▪ Identify animals that live underground. 4.6.7.A ▪ Identify niches for producers, consumers and decomposers within an ecosystem.	*Earth Sciences* 3.5.4.A ▪ Identify the composition of soil as weathered rock and decomposed organic remains.		Hands On Investigation Observation Small Group	Verbal/Linguistic Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.B, 4.1.7.D, 4.4.7.B, 4.6.7.A
Science and Technology: 3.5.4.B
3.1.7.C, 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Do You Dig Wetland Soil?	*Watersheds and Wetlands* 4.1.7.B ▪ Explain factors that affect water quality and flow through a watershed. 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. *Agriculture and Society* 4.4.7.B ▪ Determine how water has influenced the development of Pennsylvania soil types. *Ecosystems and their Interactions* 4.6.7.A ▪ Explain the importance of particle sizes in different soil types. ▪ Explain how different soil types determine the characteristics of ecosystems.	*Unifying Themes* 3.1.7.C ▪ Identify different forms of patterns and use them to group and classify specific objects. *Inquiry and Design* 3.2.7.B ▪ Describe materials using a variety of scales. ▪ Describe relationships by making inferences and predictions. *Earth Sciences* 3.5.4.B ▪ Identify and sort earth materials according to a classification key (3.g., soil/rock type).	Geography *The Physical Characteristics of Places and Regions* 7.2.6.A	Classification Data Collection Hands On Investigation Observation	Verbal/Linguistic Visual/Spatial Logical/Mathematical Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.B, 4.1.7.D, 4.4.7.B
Science and Technology: 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
How Thirsty is the Ground?	*Watersheds and Wetlands* 4.1.7.B ▪ Explain factors that affect water quality and flow through a watershed. 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. *Agriculture and Society* 4.4.7.B ▪ Explain the importance of particle sizes in different soil types. ▪ Determine how water has influenced the development of Pennsylvania soil types.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. ▪ Communicate, use space/time relationships, define operationally, raise questions, formulate hypotheses, test and experiment.	Mathematics *Computation and Estimation* 2.2.8.B *Measurement and Estimation* 2.3.8.B	Calculation Comparison Data Collection Hands On Investigation Observation Small Group	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.2.7.D, 4.4.7.C, 4.6.7.A
Science and Technology: 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
A Rottin' Experiment	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. *Renewable and Nonrenewable Resources* 4.2.7.D ▪ Compare the decomposition rates of different organic materials. *Agriculture and Society* 4.4.7.C ▪ Analyze the needs of plants and animals as they relate to climate and soil conditions. *Ecosystems and their Interactions* 4.6.7.A ▪ Demonstrate the dependency of living components in the ecosystem on the nonliving components.	*Unifying Themes* 3.1.7.B ▪ Apply models to predict specific results and observations (e.g., population growth, effects of infectious organisms). *Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. ▪ Design controlled experiments, recognize variables, and manipulate variables. ▪ Interpret data, formulate models, design models, and produce solutions.	Mathematics *Statistics and Data Analysis* 2.6.5A	Data Collection Experiment Graphing Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.1.7.E
Science and Technology: 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Nature's Filter	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils ▪ Describe the different functions of a wetland. 4.1.7.E ▪ Explain the impact of watersheds and wetlands in flood control, wildlife habitats and pollution abatement.	*Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. ▪ Communicate, use space/time relationships, define operationally, raise questions, formulate hypotheses, test and experiment.		Demonstration Investigation Observation	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.E, 4.8.10.C, 4.9.10.A
Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Hear Ye! Hear Ye!	*Watersheds and Wetlands* 4.1.10.E ▪ Identify the effects of humans and human events on watersheds. *Humans and the Environment* 4.8.10.C ▪ Analyze and evaluate changes in the environment that are the result of human activities. *Environmental Laws and Regulations* 4.9.10.A ▪ Understand conflicting rights of property owners and environmental laws and regulations. ▪ Analyze the roles that local, state and federal governments play in the development and enforcement of environmental laws.		Reading, Writing, Speaking and Listening *Speaking and Listening* 1.6.8.A, 1.6.8.D Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts* 9.1.8.B Civics and Government *Rights and Responsibilities of Citizenship* 5.2.9.C	Problem Solving Role Playing	Verbal/Linguistic Logical/Mathematical Interpersonal	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.3.7.B, 4.8.7.F
4.1.10.E, 4.8.10.C

Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Hydropoly	*Watersheds and Wetlands* 4.1.10.E ▪ Identify the effects of humans and human events on watersheds. *Environmental Health* 4.3.7.B ▪ Identify land use practices and their relation to environmental health. *Humans and the Environment* 4.8.7.D ▪ Explain how human activities and natural events have affected ecosystems. ▪ Explain how conservation practices have influenced ecosystems. 4.8.10.C ▪ Analyze and evaluate changes in the environment that are the result of human activities.			Gaming Problem Solving Valuing	Verbal/Linguistic Intrapersonal	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D, 4.2.7.D, 4.6.7.A
Science and Technology: 3.1.7.B, 3.2.7.B

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
People of the Bog	*Watersheds and Wetlands* 4.1.7.D ▪ Identify specific characteristics of wetland plants and soils. ▪ Recognize the different types of plants and animals. ▪ Describe different types of wetlands. *Renewable and Nonrenewable Resources* 4.2.7.D ▪ Compare the decomposition rates of different organic materials. *Ecosystems and their Interactions* 4.6.7.A ▪ Describe and explain the adaptations of plants and animals to their environment.	*Unifying Themes* 3.1.7.B ▪ Apply models to predict specific results and observations (e.g., population growth, effects of infectious organisms). *Inquiry and Design* 3.2.7.B ▪ Describe relationships by making inferences and predictions. ▪ Design controlled experiments, recognize variables, and manipulate variables. ▪ Interpret data, formulate models, design models, and produce solutions.		Data Collection Experiment Writing	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.9.10.A
4.9.12.A
Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Regulation Rummy	*Environmental Laws and Regulations* 4.9.10.A ▪ Analyze the roles that local, state and federal governments play in the development and enforcement of environmental laws. 4.9.12.A ▪ Analyze and explain how issues lead to environmental law or regulation (e.g., underground storage tanks, regulation of water discharges, hazardous, solid and liquid industrial waste, endangered species).		Civics and Government *How Government Works* 5.3.9.D	Analysis Gaming Small Group	Verbal/Linguistic Logical/Mathematical	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.4.D, 4.2.4.A, 4.8.4.D
Science and Technology: 3.1.4.A, 3.2.4.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
What a Boat!	*Watersheds and Wetlands* 4.1.4.D ▪ Identify plants and animals found in wetlands. *Renewable and Nonrenewable Resources* 4.2.4.A ▪ Identify how the environment provides for the needs of people. *Humans and the Environment* 4.8.4.D ▪ Identify items used in daily life that come from natural resources.	*Unifying Themes* 3.1.4.B ▪ Identify and apply models as tools for prediction and insight. ▪ Apply appropriate simple modeling tools and techniques. *Inquiry and Design* 3.2.4.D ▪ Identify possible solutions and their course of action. ▪ Try a solution. ▪ Describe the solution, identify its impacts and modify if necessary. ▪ Show the steps taken and the results.	Geography *The Human Characteristics of Places and Regions* 7.3.3.B Arts and Humanities *Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts* 9.1.3.B	Art Form Demonstration Model	Verbal/Linguistic Logical/Mathematical Visual/Spatial	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.7.D
Science and Technology:

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Chrysti the Wordsmith on Wetlands	*Watersheds and Wetlands* 4.1.7.D ▪ Describe different types of wetlands.		Reading, Writing, Speaking and Listening *Characteristics and Functions of the English Language* 1.7.8.A *Research* 1.8.8.B Geography *The Human Characteristics of Places and Regions* 7.3.9.B	Small Group	Verbal/Linguistic	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.1.10.D, 4.8.10.C
4.1.12.E, 4.6.12.C
Science and Technology: 3.2.12.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Wetland Tradeoffs	*Watersheds and Wetlands* 4.1.10.D ▪ Describe wetlands in terms of their effects (e.g., habitat, flood, buffer zones, prevention areas, nurseries, food production areas). 4.1.12.E ▪ Evaluate the effects of natural events on watersheds and wetlands. ▪ Evaluate the effects of human activities on watersheds and wetlands. *Ecosystems and their Interaction* 4.6.12.C ▪ Analyze the effects of human action on an ecosystem. *Humans and the Environment* 4.8.10.C ▪ Analyze and evaluate changes in the environment that are the result of human activities.	*Inquiry and Design* 3.2.12.D ▪ Assess all aspects of the problem, prioritize the necessary information and formulate questions that must be answered. ▪ Propose, develop and appraise the best solution and develop alternative solutions.	Reading, Writing, Speaking and Listening *Speaking and Listening* 1.6.11.D *Research* 1.8.11.B Economics *Scarcity and Choice* 6.3.12.B Civics and Government *Rights and Responsibilities of Citizenship* 5.2.12.C	Valuing Problem Solving Discussion Research Brainstorm	Verbal/Linguistic Interpersonal Intrapersonal	

WONDERS OF WETLANDS

Standard(s): Environment and Ecology: 4.8.10.C
4.1.12.E, 4.6.12.C
Science and Technology: 3.8.10.B
3.2.12.D

Name of Activity	Environment & Ecology Standards Content	Science & Technology Standards Content	Other Standards Addressed	Teaching Strategies	Multiple Intelligences	Assessment Ideas (Teacher generated)
Helping Wetland Habitats	*Watersheds and Wetlands* 4.1.12.E ▪ Evaluate the effects of natural events on watersheds and wetlands. ▪ Evaluate the effects of human activities on watersheds and wetlands. *Ecosystems and their Interaction* 4.6.12.C ▪ Analyze the effects of human action on an ecosystem. *Humans and the Environment* 4.8.10.C ▪ Analyze and evaluate changes in the environment that are the result of human activities.	*Inquiry and Design* 3.2.12.D ▪ Assess all aspects of the problem, prioritize the necessary information and formulate questions that must be answered. ▪ Propose, develop and appraise the best solution and develop alternative solutions. ▪ Implement and assess the solution. *Science, Technology and Human Endeavors* 3.8.10.B ▪ Identify several problems and opportunities that exist in your community, apply various problem-solving methods to design and evaluate possible solutions.	Reading, Writing, Speaking and Listening *Types of Writing* 1.4.8.B 1.4.11.B	Analysis Hands On Observation Problem Solving	Verbal/Linguistic Logical/Mathematical Visual/Spatial Naturalist Intrapersonal	