



**PITTSBURGH ZOO
& PPG AQUARIUM**

**Working Wild
Primary Teacher Packet**

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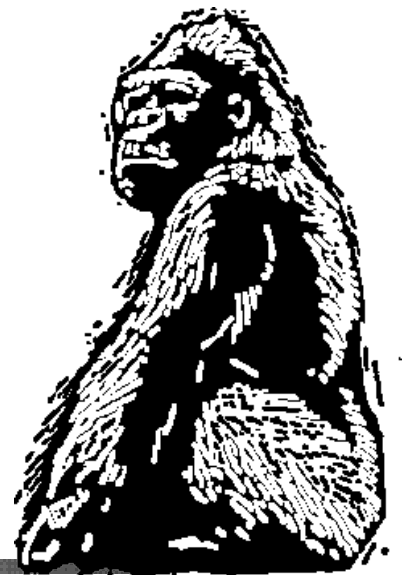
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Academic Standards for Environment and Ecology

4.6 ECOSYSTEMS AND THEIR INTERACTIONS

- 4.6.4 A Understand that living things are dependent on non-living things in the environment for survival.

4.7 THREATENED, ENDANGERED, AND EXTINCT SPECIES

- 4.7.4 A Identify differences in living things that relate to their survival.
4.7.4 B Know that adaptations are important for survival.

4.8 HUMANS AND THE ENVIRONMENT

- 4.8.4 C Explain how human activities may change the environment.
4.8.4 D Know the importance of natural resources in daily life.

Academic Standards for Science and Technology

3.1 BIOLOGICAL SCIENCES

- 3.1.4 A Know the similarities and differences of living things.

Academic Standards for Career Education and Work

13.1 CAREER AWARENESS AND PREPARATION

- 13.1.3 C Identify the range of jobs available in the community.
13.1.3 F Explain why education and training plans are important to careers.

Working Wild Primary Background Information

The Pittsburgh Zoo & PPG Aquarium is open every day of the year except Thanksgiving, Christmas Day, and New Year's Day! The Pittsburgh Zoo & PPG Aquarium is a 77-acre facility that is home to thousands of animals representing hundreds of diverse species. Committed to education, research and wildlife conservation, the Pittsburgh Zoo & PPG Aquarium is actively involved in 25 Species Survival Plans and proudly exhibits 32 threatened or endangered species. The Pittsburgh Zoo & PPG Aquarium is one of only six major zoo and aquarium combinations in the country.

It takes a lot to run a zoo. Did you know that the Pittsburgh Zoo & PPG Aquarium employs more than 250 people each year? Of course the animals need to be cared for, but so do the plants, grounds, finances, visitors, and more!

Conservation is a vital part of the Pittsburgh Zoo & PPG Aquarium's mission, and therefore a vital part of all careers at the zoo. With more than 100 million people visiting American Zoo & Aquarium Association (AZA) institutions annually, all zoo and aquarium employees, from the keepers to the finance officers, have the opportunity to educate the public about the critical need for conservation of wildlife and wild lands. This responsibility assures an interesting and rewarding career, but the profession requires more than a commitment to conservation - it requires hard work.

Zoo and aquarium employment is not always glamorous. Much of the work requires physical strength, as well as mental acuity. "Zookeeper" is the career most people think of when coming to the zoo. Zookeepers are responsible not only for feeding and cleaning, but also for making detailed observations of the animals in their care. Enrichment and training are some of the job's highlights, as well as helping to care for any new-born animals that may come along.

OTHER ZOO CAREERS INCLUDE:

Aquarist - a person who maintains the exhibits in the aquarium

Education - the zoo department that teaches about conservation and the natural world

Finance - the department that is responsible for the day to day handling of the zoo's money

Graphics - the department that creates zoo artwork, graphics, and publications

Grounds - the department responsible for daily cleaning and upkeep of public areas

Horticulture - the zoo department that cares for the zoo's plant collection

Maintenance - plumbers, carpenters, painters, and electricians that build and repair zoo structures

Marketing - the department that promotes the zoo on radio, television, and print

Service Systems - the zoo department responsible for food concessions and gift shops

Veterinarian - a doctor that provides medical attention for the zoo's animal collection

Visitor Services - the department that attends to visitor concerns and is responsible for the train, carousel, trams, and security

Zoo Director - the person that oversees all aspects of the zoo

Working Wild Vocabulary

Adaptation - A physical or behavioral characteristic that aids survival

Career - A long-term profession or job

Endangered - A species at risk of becoming extinct

Extinct- The total loss of a species

Habitat- An animal's home (includes food, water, shelter, and space)

Horticulturist - A person who takes care of plants

Threatened - A species at risk of becoming endangered

Veterinarian - A doctor who provides medical attention to animals

Zookeeper - A person who is responsible for the daily care of animals

Working Wild Resources

Suggested Reading List

I Want to Be a Vet by Daniel Liebman (ISBN 1-55209-471-5)

I Want to Be a Zookeeper by Daniel Liebman (ISBN 1-55297-697-1)

Working with Wildlife: A Guide to Careers in the Animal World by Thane Maynard (ISBN 0-53111-538-0)

Z is for Zookeeper by Marie and Roland Smith (ISBN 1-58536-158-5)

Zoo Animals: A Smithsonian Guide by Michael H. Robinson and David Challinor (ISBN 0-020860406-7)

Zookeeper by Eleanor Archer (ISBN 0-74965-587-9)

Internet Resources

American Association of Zoo Keepers, Inc www.aazk.org

American Zoo and Aquarium Association www.aza.org

AZA for Kids (Aza'sWeb) www.azasweb.com

Department of Conservation and Natural Resources www.dcnr.state.pa.us/education

International Marine Animal Trainers Association www.imata.org

National Agricultural Library www.nal.usda.gov/kids/careers.htm

National Wildlife Federation www.nwf.org

Pennsylvania Game Commission www.pgc.state.pa.us

San Diego Zoo www.sandiegozoo.org/kids/job_profiles.html

Sea World www.seaworld.org/career-resources/info-books/zoo-careers/index.htm

Shedd Aquarium www.sheddaquarium.org/kid_scenes_3.html

The Big Zoo www.thebigzoo.com

Utah's Hogle Zoo www.hoglezoo.org/education

Zoo Animals

Primary Pre-Visit Activity

Time: 45 minutes

OBJECTIVES

TSWBAT define the terms threatened and endangered species, adaptation, and habitat.

TSWBAT recognize the importance of adaptations to an animal's survival.

TSWBAT identify the differences between four zoo animal species.

MATERIALS

Zoo Animals Worksheet

Library books

Internet Access

Pencils/ Pens/ Crayons

ANTICIPATORY SET

Ask the students to name their favorite zoo animal. Define the terms threatened, endangered, habitat, and adaptation. Ask the students if their favorite zoo animal is a threatened or endangered species. Explain to the students that the best way to help threatened or endangered species is to learn more about them, including learning about their adaptations and habitat.

DEVELOPMENT OF LESSON

1. Tell the students that they are going to research four zoo animals.
2. Using library books, videos and/ or the internet have the students complete the Zoo Animal Worksheet.

SUMMARY

Review the worksheet with the students, and remind them of the importance of learning more about all animal species and their habitats.

Zoo Animals Worksheet

There are many wonderful animals at the Zoo.
Discover the answers to these questions about four amazing Zoo animals.

SPECTACLED BEAR

1. Where do spectacled bears live?
Antarctica Africa South America
2. What do spectacled bear's mainly eat?
Plants Animals Soil
3. Is this animal a threatened or endangered species?
Yes No

PERCULA CLOWN FISH

1. Where do clown fish live?
Rain Forest Ocean Africa
2. What body parts do they have to help them swim?
Noses Stripes Fins
3. Is this animal a threatened or endangered species?
Yes No

JAMAICAN FRUIT BAT

1. Where do Jamaican fruit bats live?
Tropical Forest Ocean Swamp
2. What body parts do they have to help them move?
Fins Wings Tails
3. Is this animal a threatened or endangered species?
Yes No

KOMODO DRAGON

1. Where do komodo dragons live?
Ocean Grassland Swamp
2. Which body part helps them find food?
Scales Tails Tongue
3. Is this animal a threatened or endangered species?
Yes No

Zoo Animals Worksheet Answer Key

There are many wonderful animals at the Zoo.
Discover the answers to these questions about four amazing Zoo animals.

SPECTACLED BEAR

1. Where do spectacled bears live?

Antarctica Africa

2. What do spectacled bear's mainly eat?

 Animals Soil

3. Is this animal a threatened or endangered species?

 No

PERCULA CLOWN FISH

1. Where do clown fish live?

Rain Forest Africa

2. What body parts do they have to help them swim?

Noses Stripes

3. Is this animal a threatened or endangered species?

Yes

JAMAICAN FRUIT BAT

1. Where do Jamaican fruit bats live?

 Ocean Swamp

2. What body parts do they have to help them move?

Fins Tails

3. Is this animal a threatened or endangered species?

Yes

KOMODO DRAGON

1. Where do komodo dragons live?

Ocean Swamp

2. Which body part helps them find food?

Scales Tails

3. Is this animal a threatened or endangered species?

 No



Dear Zookeeper

Primary Post Visit Activity

Time: 45 minutes

OBJECTIVES:

The students will become familiar with the animals at the Pittsburgh Zoo & PPG Aquarium.

The students will learn how to write a formal letter using the heading, body, closing, and signature format.

MATERIALS:

Paper

Pencils

Dear Zoo, by Rod Campbell

ANTICIPATORY SET

Begin by asking the students to brainstorm a list of animals that they saw on their fieldtrip to the Pittsburgh Zoo & PPG Aquarium. Which animals were their favorites? Which were their least favorites? Did they see any animals that they have never heard of before?

DEVELOPMENT OF LESSON

Read the book, Dear Zoo, by Rod Campbell.

Ask students to think about being a zookeeper for their favorite zoo animal. Discuss with the students all of the responsibilities that go with being a zookeeper. Ask the students to tell you what they would like most and what they would like least about being a zookeeper for their favorite animal.

Tell the students that today we will be writing a letter to a zookeeper. In order to write a letter, there are a few things that we have to learn. Explain and demonstrate the steps of writing a proper letter- heading, body, closing, and signature.

Have the students write a letter to the keeper of their favorite animal. Have students address the following questions:

Why is their favorite animal special?

What do they want to know about being a zookeeper for their favorite animal?

Extension: For students who finish early, have them draw a picture of their field trip to the Zoo. Include their drawings with their letters.

SUMMARY

Have students read and present their letters and drawings to their classmates. Mail the letters to:
The Pittsburgh Zoo & PPG Aquarium

Attention: Conservation Education Department

One Wild Place

Pittsburgh, PA 15206



Working Wild Word Search

Zookeeper
Education
Veterinarian
Finance

Director
Horticulture
Marketing
Grounds

Development
Concessions
Maintenance
Graphics

S	C	K	C	L	R	V	D	Q	P	W	V	I	G	Q	K	D	R	E	E
M	N	C	G	L	S	I	M	Q	J	E	D	S	Q	L	V	Z	W	C	D
E	T	F	L	Z	R	E	Y	K	T	D	Y	E	P	B	U	A	A	N	U
X	C	Z	H	E	S	S	I	E	I	V	Y	F	I	E	G	J	R	A	C
U	S	N	C	O	U	T	R	Z	L	A	L	A	E	T	X	U	N	N	A
A	M	T	A	K	Y	I	B	Q	N	M	J	D	R	Z	Y	O	N	E	T
M	O	S	N	N	N	E	R	U	T	L	U	C	I	T	R	O	H	T	I
R	A	S	K	A	I	A	O	S	E	T	N	A	B	L	C	N	A	N	O
M	R	R	R	S	Z	F	F	J	N	E	Q	G	Y	T	Q	A	F	I	N
K	O	I	K	A	N	L	I	E	Z	O	O	K	E	E	P	E	R	A	S
A	A	D	T	E	Y	O	M	S	C	I	H	P	A	R	G	E	E	M	D
N	J	U	O	N	T	P	I	G	V	Q	T	H	W	M	W	G	D	M	N
R	S	K	R	D	O	I	L	S	E	A	M	R	Z	B	A	F	H	X	U
Q	C	G	E	L	L	E	N	D	S	Q	G	K	N	P	D	R	G	A	O
J	W	F	E	M	D	E	P	G	R	E	M	K	K	B	F	Y	B	R	R
G	S	V	J	F	I	J	U	S	S	Z	C	X	V	I	Q	Z	Y	L	G
B	E	I	F	Z	D	J	T	Q	M	I	W	N	M	Q	G	P	F	Z	Z
D	J	K	G	R	S	D	X	L	N	R	T	D	O	G	K	X	N	N	J
D	V	Y	M	D	D	E	K	K	L	K	R	Z	S	C	S	U	X	I	Y



Wild Poetry

Show your appreciation for a zoo career or your favorite zoo animal by writing a poem about it.

How to write poetry using the Cinquain style:

1. Use one word (a noun) to name the subject you are writing about.
2. Use two words (adjectives) to describe #1.
3. Use three words (verbs) to describe what #1 might be doing.
4. Use a four-word phrase to describe how you feel about #1.
5. Use another word (synonym) that means the same as #1.

EXAMPLE:

Teacher
Inspirational Intelligent
Encouraging Teaching Learning
Share Knowledge With Others
Educator

WRITE YOUR OWN CINQUAIN BELOW:

EXTENSION:

Write a song about your favorite zoo career or zoo animal.

EXAMPLE:

(Sung to "Wheels on the Bus")
Zookeepers have to care for animals
Care for animals, care for animals
Zookeepers have to care for animals, all day long.

Zoo Career Bingo

TO PLAY:

Give each student one bingo card.

Call out the description.

Students should cover the title of the zoo job that matches the description.

The first student to cover five squares (*across, down, or diagonal*) wins the game.

<p>I clean animal exhibits and feed them proper food.</p> <p>ZOOKEEPER</p>	<p>I take animals to visit schools so that others can learn about them.</p> <p>ZOO TEACHER</p>	<p>I make sick animals healthy.</p> <p>VETERINARIAN</p>	<p>I make sure the zoo is clean for all of the visitors.</p> <p>GROUNDS</p>	<p>I take care of the zoo's money.</p> <p>FINANCE</p>
<p>I write commercials for the zoo.</p> <p>MARKETING</p>	<p>I raise money for new projects for the zoo.</p> <p>DEVELOPMENT</p>	<p>I design the zoo's calendars, brochures, and signs.</p> <p>GRAPHICS</p>	<p>I build buildings, fix exhibits, and make sure everything works properly.</p> <p>MAINTENANCE</p>	<p>I run the zoo and make decisions for all projects.</p> <p>ZOO DIRECTOR</p>
<p>I make the food and beverages for the visitors.</p> <p>CONCESSION STANDS</p>	<p>I make the diets and send them to the zookeepers.</p> <p>COMMISSARY</p>	<p>I make sure all the people in the zoo stay safe.</p> <p>SECURITY</p>	<p>I drive the train or zoo trams so that visitors have fun.</p> <p>VISITOR SERVICES</p>	<p>I study animals so that we can learn more about them.</p> <p>RESEARCH</p>
<p>I am the heaviest animal at the Pittsburgh Zoo.</p> <p>AFRICAN ELEPHANT</p>	<p>I hunt for fish in the ocean and then sleep on the beach. I make barking sounds.</p> <p>SEA LION</p>	<p>I live in a family called a pride.</p> <p>LION</p>	<p>I live in a family called a troop.</p> <p>GORILLA</p>	<p>I am the tallest animal at the zoo.</p> <p>GIRAFFE</p>
<p>I take care of people who are hurt or sick at the zoo.</p> <p>FIRST AID</p>	<p>I got my name because I look like I am wearing glasses.</p> <p>SPECTACLED BEAR</p>	<p>I can have over 30,000 teeth in my lifetime.</p> <p>SHARK</p>	<p>I am a Pennsylvania venomous snake without a rattle.</p> <p>COPPERHEAD</p>	<p>I take care of the zoo's plants.</p> <p>HORTICULTURE</p>



PITTSBURGH ZOO
& PPG AQUARIUM

Zoo Careers Bingo Card #1

Cover the space when you hear the matching description called.

Teacher	Spectacled Bear	Concession Stands	Grounds	Research
Lion	Marketing	Security	Giraffe	Sea Lion
Horticulture	Finance	Free Space	First Aid	Commissary
Shark	Gorilla	Elephant	Development	Visitor Services
Zoo Director	Graphics	Maintenance	Copperhead	Veterinarian

Zoo Careers Bingo Card #2

Cover the space when you hear the matching description called.

Sea Lion	Concession Stands	Spectacled Bear	Shark	Copperhead
Elephant	Graphics	Security	Gorilla	Teacher
Finance	Horticulture	Free Space	Veterinarian	Commissary
Zoo Director	Giraffe	Lion	Development	Visitor Services
Grounds	Marketing	Maintenance	Research	First Aid