

Inky's Ocean Adventure

Grade Level: Grade 3 – 5

Content area(s): Language Arts, and Fine Arts

Classroom Time: Approximately 90 minutes

Purpose: Learn and understand terms used to describe how to save our earth, understand the consequences of littering and practice creative writing.

Skills Addressed:

ELA: Read and respond to information concerning the needs and demands of society, communicate through writing

Visual Arts Skill: Convey idea, communicate meaning, and connect to other disciplines

Supplies:

Attachments, attachment 3 cut into slips, overhead or projector, paper, pencil/pen, and markers or colored pencils

Lesson Process:

Warm-up –

- A. Read the story about “Inky” the pigmy sperm whale displaying the pictures of pygmy sperm whales at the same time. – Attachment 1
- B. Ask students the following questions:
 - How did the trash Inky ate get into the ocean? - *Examples: People put it there, it flows into the ocean from the rivers and streams, etc.*
 - Do you think other whales ate trash? Why or why not? – *Ex: Yes because the trash is in the ocean and it appears to look like the food or no, it only happened once..*
 - Do you think ocean life eat trash? Why or why not? - *Ex. Yes, because it looks like food they eat or no, it doesn't look like food...*
 - What do you think happens to other ocean lives that eat trash? – *Ex: They get sick and die, nothing, they don't eat the trash...*
 - Why do you think Inky ate the trash? – *Ex: It looked like food she would normally eat...*
 - Is there a way to stop trash from getting into the ocean? Give examples. – *Ex: Yes, don't litter the beaches or waterways; create laws to protect the waterways and to discourage companies from putting their trash into the ocean.*
 - Do you think trash is in other oceans? – *Ex: Yes because it happens all over or no because only people on the east coast litter the ocean...*

Lesson procedure –

- A. Give each student the green terms word find sheet. – Attachment 2
- B. Ask the students what the term “green” means. – *Ex: Color, saving the environment, green grass, etc...*

C. Discuss the meanings of the green topics at the bottom of the word find sheet in terms of trash/recycling. – *Examples:*

bottles - *plastic*

electronics – *fills landfills*

reuse – *new or different way to use something*

carbon footprint – *carbon dioxide released*

emissions – *from cars/businesses created by oil usage*

solar energy - *using the sun as an energy resource*

climate change – *change of the temperature of the earth over a period of time*

green – *saving the environment*

transportation – *using environmentally friendly forms*

compost - *putting food waste together in a container to use in gardens*

home – *using energy efficient light bulbs, saving on energy*

waste – *what we throw away*

conservation – *saving the land*

paper – *recycle it*

water – *keep it clean, conserve*

Eco -friendly – *helps the environment*

recycle – *change into something else to reuse the material*

wind power – *using wind as a source of energy*

Eco -system – *Ecology system*

Reduce – *not use as much*

D. Students complete the word find.

E. Divide the students into groups of two or three students.

F. Give each student a green term – Attachment 3

G. Each group writes a short child's story using the green topic they were given.

H. After writing the story the students turn their story into an illustrated book including a book cover.

I. Students share their books with the class.

Student assessment or final product to be developed:

A. Class discussion

B. Teacher observation

C. Word find sheet

D. Story

E. Book

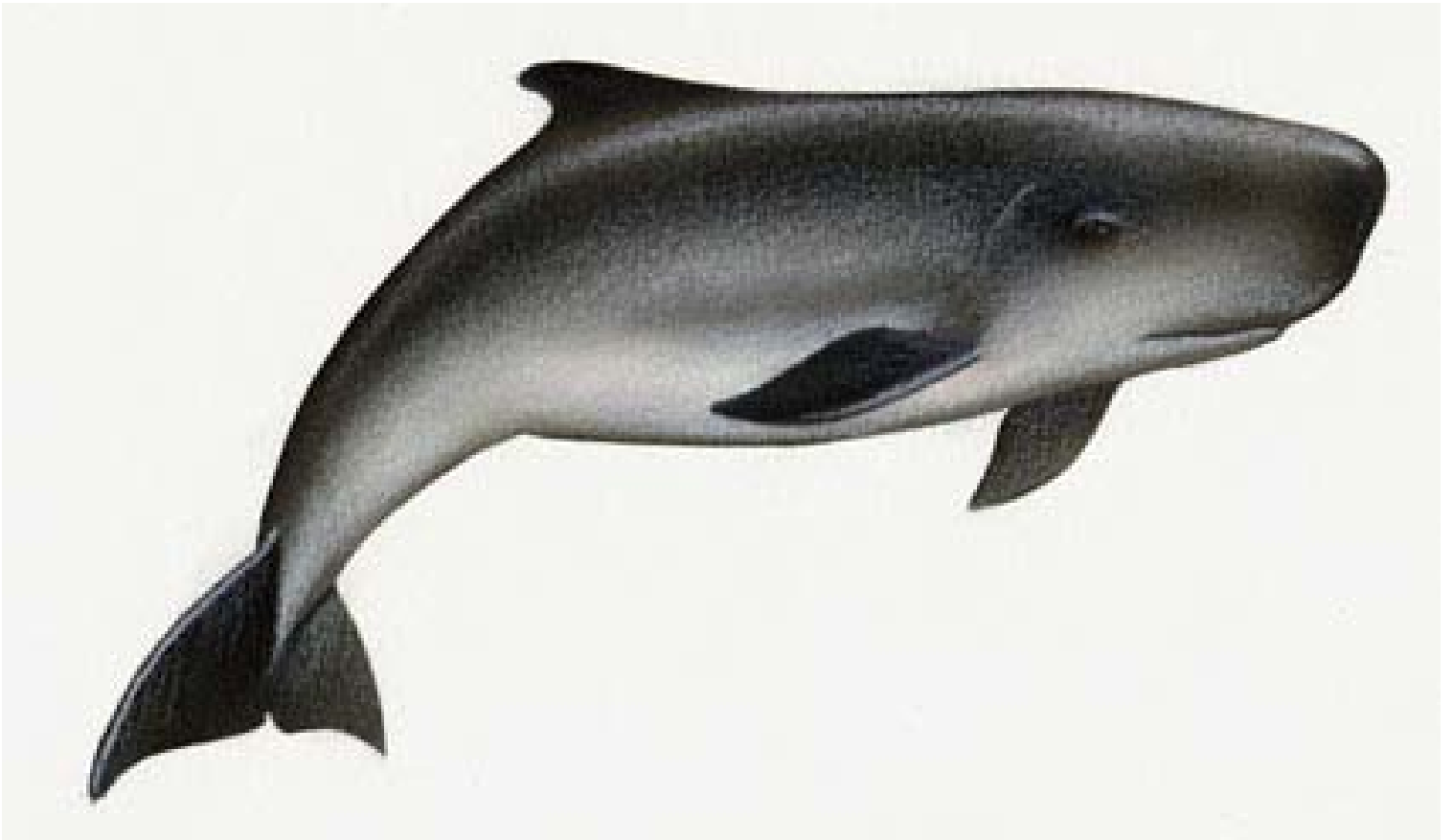
Extension activities (optional)

A. Students turn their books into a puppet show making puppets out of recycled material

- B. Students create their own crossword puzzle using the green terms
- C. Students research pygmy sperm whales and write a paper or orally present the information they obtained
- D. Project GRAD Houston math lesson Energ G.
- E. Project GRAD Houston science lesson “Where Does it End?”

Website links: http://www.uscg.mil/top/downloads/coloring_books/inky/Inky.pdf;
<http://news.google.com/newspapers?nid=1290&dat=19940506&id=BvQPAAAIBAJ&sjid=pYwDAAAIBAJ&pg=4540,3307417>; http://www.marinemammalconservancy.org/education_species.html

Attachment 1 – Pygmy Sperm Whales



Inky

A female pygmy sperm whale, later to be named Inky, was born in the Atlantic Ocean. She loved living in the ocean where she found squid, fish and krill to eat. She used her natural instincts to locate food although periodically she would find some interesting objects she thought were food. She would continue to eat and grow. One day she stopped growing. On November 25, 1993 she became stranded in a New Jersey inlet. Inky became beached when the tide went out.

Passersby noticed her on the beach and contacted the US Coast Guard to assist. The US Coast Guard took Inky by helicopter to a truck that took her to the National Aquarium of Baltimore. From Baltimore Inky was flown in a Navy cargo plane to St. Augustine, Florida. She was transported by truck to Marineland where Inky would be put in an outdoor tank to be nursed back to health before being put back into the Atlantic Ocean.

When Inky was found she was suffering from respiratory, parasitic and fungal infections. The infections were treated with antibiotics, but Inky wasn't improving. She was still at least 100 pounds under the normal weight of 300 pounds.

Finding Inky gave the scientists an opportunity to learn about the pigmy sperm whale yet they wanted to make sure Inky was released back into her natural habitat. Unfortunately, Inky wasn't improving. They became concerned. They decided to insert a small camera into her esophagus to look into her stomach. The scientists were surprised at what they found in Inky's stomach; large trash bags, cellophane and a Mylar balloon! Inky thought these items were the food she needed to survive. Instead they were the things contributing to her illness and possible death. Inky had five procedures done in five weeks to remove all the trash they found in her stomach.

Inky began to eat healthy food again, gain weight, swim and finally produced the inky film she was named for. (Pygmy sperm whales emit a reddish film into the water when they defecate.) In May 1994 Inky was put on a ship and taken out into the Atlantic Ocean where a healthy Inky was released to swim with other pygmy whales.

Green Topics Word Find

Name _____

Date _____

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

bottles
carbon footprint
climate change
compost
conservation
Eco friendly
Eco system

electronics
emissions
green
home
paper
recycle
reduce

reuse
solar energy
transportation
waste
water
wind power

Attachment 3

Terms

Recycle	Compost
Solar Energy	Reuse
Conservation	Bottles
Water	Paper
Home	Emissions
Electronics	Waste
Eco-friendly	Eco-system
Transportation	Climate change
Wind power	Carbon footprint
Green	Reduce

National Standards

English Language Arts

NL-ENG.K-12.1 READING FOR PERSPECTIVE

Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works

NL-ENG.K-12.5 COMMUNICATION STRATEGIES

Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Visual Arts

NA-VA.K-4.2 USING KNOWLEDGE OF STRUCTURES AND FUNCTION

Students know the differences among visual characteristics and purposes of art in order to convey ideas

NA-VA.K-4.3 CHOOSING AND EVALUATING A RANGE OF SUBJECT MATTER, SYMBOLS, AND IDEAS

Students select and use subject matter, symbols, and ideas to communicate meaning

NA-VA.K-4.6 MAKING CONNECTIONS BETWEEN VISUAL ARTS AND OTHER DISCIPLINES

Students identify connections between the visual arts and other disciplines in the curriculum

TAKS Objectives

English Language Arts

Listening/speaking/purposes. The student listens actively and purposefully in a variety of settings. The student is expected to: determine the purposes for listening such as to gain information, to solve problems, or to enjoy and appreciate

Reading/word identification. The student uses a variety of word identification strategies. The student is expected to: locate the meanings, pronunciations, and derivations of unfamiliar words using dictionaries, glossaries, and other sources

Reading/vocabulary development. The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to: draw on experiences to bring meanings to words in context such as interpreting figurative language and multiple-meaning words

Reading/literary response. The student expresses and supports responses to various types of texts. The student is expected to: offer observations, make connections, react, speculate, interpret, and raise questions in response to texts

Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to: identify the purposes of different types of texts such as to inform, influence, express, or entertain

Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to: write to express, discover, record, develop, reflect on ideas, and to problem solve, write to entertain such as to compose humorous poems or short stories

Writing/penmanship/capitalization/punctuation. The student composes original texts, applying the conventions of written language, including capitalization, punctuation, and penmanship, to communicate clearly. The student is expected to: (A) write legibly by selecting cursive or manuscript as appropriate and (B) capitalize and punctuate correctly to clarify and enhance meaning such as capitalizing titles, using possessives, commas in a series, commas in direct address, and sentence punctuation

Writing/spelling. The student spells proficiently. The student is expected to: (A) write with accurate spelling of syllable constructions, including closed, open, consonant before -le, and syllable boundary patterns; (B) write with accurate spelling of roots such as drink, speak, read, or happy, inflections such as those that change tense or number, suffixes such as -able or -less, and prefixes such as re- or un-; (C) use resources to find correct spellings; and (D) spell accurately in final drafts.

Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to: refine selected pieces frequently to "publish" for general and specific audiences

Visual Arts

Creative expression/performance. The student expresses ideas through original artworks, using a variety of media with appropriate skill. The student is expected to: combine information from direct observation, experience, and imagination to express ideas about self, family, and community; and compare relationships between design and everyday life;