

LITERATURE AND THE SEA



ORCA OCEAN RELATED CURRICULUM ACTIVITIES



**PACIFIC SCIENCE CENTER / SEA GRANT
MARINE EDUCATION PROJECT**

Shirley Paula, Manager

ORCA OCEAN RELATED CURRICULUM ACTIVITIES

Junior High Activity Packets

<u>Title</u>	<u>Number of days</u>	<u>Author</u>
Energy from the Sea	7-11	Claire Jones
Early Fishing Peoples of Puget Sound	18	Jenifer Katahira
Beaches	10	Andrea Marrett
Literature and the Sea	12	Jenifer Katahira
Beach Profiles and Transects	7-9	Claire Jones
Tides	6	Andrea Marrett
Tools of Oceanography	3-4	Florence Sands

Activity Packets for Elementary and High School levels are also available
from:

Project ORCA
Pacific Science Center
200 Second Avenue North
Seattle, WA 98109

ORCA

The ocean? It's 2 miles away; it's 200 miles away; it's 2000 miles away. What does it matter to me? For those students who live close to the ocean, a lake or a stream, the effect of water might be more obvious. For the student who lives on a wheat farm in the arid inlands, the word ocean is remote. It may conjure up images of surf, sand and sea gulls, experiences far removed from their daily life; or it may have no meaning at all. Yet for that same youngster, the reality of the price of oversea wheat shipments or fuel costs for machinery are very real. The understanding of weather and its affects on the success or failure of crops is a basic fact of everyday life. The need for students to associate these daily problems with the influence of the marine environment exists. It requires exposure to ideas, concepts, skills and problem solving methods on the part of the youngsters. It also requires materials and resources on the part of our educators.

The goals of ORCA (Ocean Related Curriculum Activities) are: 1) to develop a basic awareness of ways in which water influences and determines the lives and environments of all living things; and 2) to develop an appreciation of the relationship of water to the study of the natural sciences, social sciences, humanities and the quality of life.

ORCA attempts to reach these goals by: 1) developing interdisciplinary curriculum materials designed to meet the needs of students and teachers living in Washington state, 2) developing a marine resource center, and 3) providing advisory services for marine educators. In conjunction with these efforts, ORCA is coordinating communication among educators throughout the state and the rest of the nation.

The curriculum materials are developed to be used in many areas including the traditional science fields. They consist of activity packets which fit existing curricula and state educational goals and are designed for use as either a unit or

7

as individual activities.

The ocean affects all our lives and we need to be aware and informed of the interconnections if we are to make sound decisions for the future of the earth, the ocean and our own well being. We hope that through Project ORCA, teachers will be encouraged to work together to help students understand and appreciate the ocean and the world of water as a part of our daily existence.

ACKNOWLEDGEMENTS

The Ocean Related Curriculum Activities (ORCA) are a product of a cooperative effort. These materials were developed at the Pacific Science Center. Assistance was provided by the National Oceanic and Atmospheric Administration (NOAA) Sea Grant held by the University of Washington. The Office of the Washington State Superintendent of Public Instruction provided technical support and assistance with printing and duplication costs.

TRIAL TEACHERS

Trial teachers test us and answer the most important question of all: "Does it work?" The teachers who gave their time, effort and advice were:

Lynda Hughes and Allen Husker, Edmonds School District
Lee Boulet; Highline School District
Barbara Deihl and Susan Swenson; Kent School District
Andrea Marrett; Lake Washington School District
Claire Jones and Jenifer Katahira; Pacific Science Center School for Science
Greg Aveleson, Joe Budde and Mary Ketcham; Renton School District
Margaret Bonham, Ivan Ellis, William Lippit, Barb Norsen and Jay Sasnett;
Seattle School District

CONSULTANTS

Several marine consultants provided valuable assistance and expertise. Our grateful thanks to:

Wolf Bauer, Hydraulic Engineer, Seattle
Dave Borden, Director of the Marine Science Center, Poulsbo
Dennis Campbell, Teacher, Edmonds School District
Alyn Duxbury, Ph.D., Assistant Director for New Programs, Division
of Marine Resources, University of Washington
Charles J. Flora, Ph.D., Director of Aquatic Studies, Western
Washington University
Charles Hardy, Coordinator, Math and Science, Highline School District
Richard Sternberg, Ph.D., Department of Geology, University of Washington

The aid, advice and encouragement of the following educators were essential to the successful development of this project:

Ann Foley, Reading Specialist; Edmonds School District
Angela Hoffman, Teacher, Pacific Science Center
David Kennedy, Supervisor of Science and Environmental Education,
Office of the Superintendent of Public Instruction
Nan Munsell, Supervisor for the Archeology Project, Pacific Science Center
Pam Phillips, Program Assistant, Pacific Science Center
Ann Sankey, Manager of Elementary Programs, Pacific Science Center
Elizabeth Sears, Biology Teacher, Edmonds School District
Jan Turnbull, Environmental Education and Energy, Shoreline School District
Beverly Williams, Education Intern, Pacific Science Center

Other consultants who offered their time and special expertise were:

Sally Snyder, Ph.D., Anthropologist
Hilary Stewart, Author
Jerry Strain and Joel Rogers, Photographers
Terry Taffoya, United Indians of All Tribes

ADVISORY COMMITTEES

The Marine Education project was reviewed annually by the Sea Grant Site Evaluation committee. We thank them for their advice and support.

Continuing guidance for the program direction was provided by the Pacific Science Center Education Committee, the members of which are:

A.D. Ayrault, Jr., Headmaster, Lakeside School
Levon Balzer, Ph.D., Dean of Instruction, Seattle Pacific University
Charles Hardy, Coordinator, Math and Science, Highline School District
David Kennedy, Supervisor of Science and Environmental Education;
Office of Superintendent of Public Instruction
Roger Olstad, Ph.D., Associate Dean of Graduate Studies, University
of Washington, Committee Chairperson
Alice Romero, Teacher, West Seattle High School
Sally Stapp, Teacher, Frank Wagner Elementary
William Stevenson, Superintendent, Shoreline School District

STAFF

Finally, our heartfelt appreciation to the staff members who were instrumental in creating, developing and supporting this project. Thank you to the curriculum writers Jenifer Katahira, Claire Jones, Andrea Marrett, Florence Sands and Sally Snyder. We appreciate the efforts of the people responsible for graphics and paste up; Susan Lundstedt, graphics; Luann Bice, artwork; Valene Starrett, covers; and Andrea Marrett and Carolyn Hanson, paste up. We sincerely thank our project investigator, Bonnie DeTurck, Director of Education and Debbie Fowler, the Marine Education Intern at the Pacific Science Center. We wish also to express our gratitude to Patty Kelley, Jan McLachlin, Leslie Wozniak and Peggy Peterson, for their patience in typing, retyping and alas, typing it all over one more time.

A special thanks to my husband, John Pauls, for all the moral support he provided during the development of these materials and his idea-generating questions.

Shirley Pauls
Project Manager
September 1977 to February 1979

For current information of project activities and/or materials, contact:

Andrea Marrett
Manager, Marine Education Project
Pacific Science Center
200 2nd Avenue North
Seattle, WA 98109

LITERATURE AND THE SEA (12 days)

1

ABSTRACT:

This packet includes short stories, poems and excerpts from longer prose selections about the sea and a variety of student activities to accompany them. It is divided into six activities. Ideally, the students would progress from Activity 1 through Activity 6. However, each activity may be used separately.

SUBJECT AREAS:

English, Language Arts, Social Studies.

GRADE LEVELS:

Junior High

WRITTEN BY:

Jenifer Katahira

LITERATURE AND THE SEA

2

OBJECTIVES:

The Student will:

1. Know the extent to which our world is a water planet.
2. Recognize the different and often contradictory perspectives from which people may view the sea.
3. Know that the sea is a forceful subject for literature.
4. Recognize and appreciate the value of our own experiences as perspectives from which to view the sea.
5. Understand various techniques writers use to recreate in literature experiences similar to our own and apply these techniques to students' own writing.
6. Increase their awareness of the levels of observation of which we are capable.
7. Develop the language skills of skimming, making comparisons, drawing inferences.
8. Increase his/her vocabulary.
9. Know Puget Sound geographical locations as they pertain to the literature in the Activity Packet.
10. Become familiar with a variety of literature about the sea.

LITERATURE AND THE SEA

OVERVIEW:

ACTIVITY 1:

A Stay at the Ocean - presents a fictional short story. Students try to piece together the plot by studying excerpts from the story. Part-way through the story, students construct their own ending to be compared later to actual ending (2 days).

- classroom discussion - based on questions about excerpts
- presentation of first part of story
- small group activity - work out possible endings
- student writing - endings for story
- presentation of actual conclusion of story

ACTIVITY 2:

Our Relationship to the World's Water - presents information about the marine environment pertinent to the literature that follows (1 day).

- quiz - assess students' own knowledge and prepare for activities to follow
- discussion of quiz, including presentation of diagrams
- discussion of varied perspectives from which to view the sea - students compile list
- student writing/listen to record
- extended activities

ACTIVITY 3:

Personal Sea Experiences - develop idea that personal sea experiences provide subjects for literature. There are various perspectives from which to view the sea. Allows students to apply knowledge of writers' technique of appeal to the senses to both reading and writing literature (1-2 day).

- discussion - students compile list of sea-related experiences
- presentation of three poems
- study questions
- play record of whale sounds
- assignment - students write paragraph appealing to senses
- extended activities - film (Cousteau)

ACTIVITY 4:

Ferries on Puget Sound - familiarizes students with Puget Sound geography necessary to understand the literature that follows. Presents a poem and short story about ferries on Puget Sound (2 days)

- map assignment - label Puget Sound locations mentioned in the two selections
- discussion - ferry schedules and runs on Puget Sound
- poem - discussion
- vocabulary assignment
- short story
- discussion
- assignment - student writing - write a newspaper article reporting the same event depicted in the story.

ACTIVITY 5:

Poetry of the Sea - suggestions for reading and understanding poetry. Presentation of a variety of poems about the sea environment. (3 days)

- a. classroom instruction - reading poetry
- b. student reading of poem and diagram activity
- c. vocabulary assignment - discussion
- d. discussion - read poem
- e. assignment - poems and study questions
- f. extended activities

ACTIVITY 6:

The Sea as a Contradiction in Literature - develops the idea that the sea can be viewed as both a friend and an enemy. (3 days)

- a. discussion - sea as a contradiction
- b. students list pleasant experiences
- c. read Lindberg excerpt - discuss
- d. student writing - describe sea monster
- e. read Verne excerpt
- f. students read their descriptions aloud
- g. extended activities -- illustrate Verne's monster from his detailed description.

LITERATURE AND THE SEA

TABLE OF CONTENTS:		<u>Page</u>
Activity 1	A Stay at the Ocean	6
Activity 2	Our Relationship to the World's Water.	25
Activity 3	Personal Sea Experiences	33
Activity 4	Ferries of the Puget Sound	39
Activity 5	Poetry of the Sea	48
Activity 6	The Sea as a Contradiction	64
Vocabulary	Literature and the Sea	72
Evaluation	Literature and the Sea	74
Bibliography	Literature and the Sea	76

This activity packet was produced at the Pacific Science Center. With noted exceptions for copyright, the permission to reprint these materials is subject to approval by the Pacific Science Center.



ACTIVITY 1:

A STAY AT THE OCEAN

(3 days)



ACTIVITY 1: A STAY AT THE OCEAN (3 days)

- CONCEPTS:** Fiction can be a tool to make us realize the importance of knowledge about the sea.
- OBJECTIVES:**
1. Motivate students for study of unit
 2. Presentation of a short story
 3. Develop skills of skimming, making comparisons, drawing inferences, enlarging vocabulary, purposeful listening
 4. Students attempt to imitate a writing style.
- TEACHER PREPARATION:**
1. Prepare excerpt sheet for each student
 2. Read the story and entire lesson plan, making sure you understand the procedure (i.e., discuss excerpts with entire class using questions before reading story). If teacher feels the story is too long to read aloud, duplicate part of it for a student reading.
- MATERIALS:**
1. Teacher lesson plan
 2. Excerpt sheet for each student
 3. Copy of "A Stay at the Ocean"
- PROCEDURES:**
1. Pass out sheet of excerpts to each student (follow Teacher Lesson Plan).
 - a. accept all answers as valid guesses and do not give the answers to the questions (create as much mystery and curiosity as possible). They will learn the answers when they hear the story.
 2. Read part of the story to the class. Stop reading on page 12. "What is it..."
 3. Have students work in pairs or small groups to work out the ending of the story. You might need to ask questions to get them started.
 4. Then ask all your students to write a one-page ending to the story (see assignments).
 5. If you wish, you can have your groups meet again to read their endings to each other. They could choose one to read to the class. Discuss their conclusions. Accept all contributions as valid possibilities.
 6. Finish reading the story.
 7. Discuss the story.
 - a. "We can usually understand the plot of a story better if we look at how the author has given problems to the characters."
 - b. "What was Steve's problem?"
 - c. "What idea do you think the author had in mind before he wrote this story? Was he trying to make the reader feel anything special? Was he trying to teach any special lesson about life? Compare this story with others you have read."
 - d. "Two-thirds of the surface of our world belongs to the ocean. We may soon know more about the moon than we do about the interactions which take place beneath the surface of this vastness. Does it matter?"

ASSIGNMENT:

8. Write a one-page ending to the story in such a way that the reader can't tell where the original story ends and the student's begins (keep same person, tense, style).
9. May wish to have students keep a notebook of all student handouts and assignments to help provide continuity throughout the unit. This notebook could be used as a form of evaluation at the end of the unit.

**EXTENDED
ACTIVITIES:**

Explore students' knowledge of tides. Are they erratic or predictable? What causes them? What parts of the story were fact-fiction?

Possible film: Tides of the Ocean - University of Washington (\$8.00 rental fee)

BIBLIOGRAPHY:

"A Stay at the Ocean" by Robley Wilson, Jr., Eco-Fiction, Washington Square Press, 1971.

Lesson Plan

Background: This lesson is designed for discussion with your whole class.
The story may take several days to develop.

A. Pass out Student Handout - excerpts from the story - for each student in your class.

B. Motivation: To gain interest of your students, ask the following questions about the preceding excerpts:
(Accept all answers to the questions as valid guesses and do not give the answers to the questions. They will learn the answers when they hear the story.)

Insuring Success: 1. "Look at #1. (Read #1 aloud to the students.) Can you identify 3 different characters?" Turn your paper over and write them down (call on several students for contributions. First, call on those who might have only one or two.)

Setting: 2. "Where do you think this story takes place? Find a word in one of the first 4 sentences that supports your guess. Circle the word."

3. "What time of day is it? How do you know?"

Skimming: 4. "In nos. 3-7 underline words or phrases that suggest the sea." (Call on students to read the sentences in which they find these words or phrases.)

Vocabulary: 5. "Circle the number of a sentence that tells you something unusual has happened." (Nos. 3, 4, 5, 6, and 8 are possibilities.) "Find #4." (Read it aloud.) "Underline one word that tells you something unusual has happened."

6. "Find #18." (Read it aloud.) "Write one word that you think would fit in place of perpendicular and one word in place of perilously."

Comparisons: 7. "Who is talking in #7? How do you know?"

8. "What do #3, 5, and 10 have in common? What do they tell you has happened?" "Does #6 help? (Discuss orally.)

9. "Find another character in #14. What is his whole name and occupation?" (Have a student come to the board and write down his/her answer. See if most of the class agrees with him/her.)

10. "Read #11. What have they never done before? Why not? Read #4 for help." (Discuss orally.)

11. Clarice is frightened of something. What do you think it is? Read #9 and #12."

Inference:

12. "Follow along while I read these sentences to see if you can figure out what has happened in the story so far." (Read the following aloud: #12, 13, 15.) Call on students to piece together the story so far.
13. "Now write a word which you think will fit in the blank in #19. What was lost?"
14. "Something significant has happened just before #23 (read it aloud.) "Read #21 and 22 to help you guess what it is."
15. "Read #24. Is there something in #12 that would help you understand what Clarice is thinking?"
16. "Now will someone try to tell what is going to happen in this story as completely as you can?"
17. "Write two words which you think will fit in the title." (Have as many as possible come to the board and write their titles.)
18. "I'm going to read most of the story to you, but I'll stop before the finish to see if you can construct an ending to the story."

NAME _____

DATE _____

PERIOD _____

A _____ AT THE _____

1. He got up and dressed. His wife, Clarice, was snoring becomingly in the big bed, and he paused on his way to the kitchen long enough to look into his daughter Linda's room and see her curly blond hair nestled into the corner of one elbow.
2. It was to the edge of this overhang that Stephen walked each day, to look out and to assemble his private thoughts--
3. Rocks he had never seen before had risen up off the end of the Point.
4. Thrumcap Island, nearly a mile out, was an unaccustomed high shadow in the morning fog.
5. The rope from its bow looked ridiculous, as if the boat were anchored somewhere under the earth.
6. "I know, but this is really low. I've never seen anything like it."
7. "Daddy, does the moon make tides?"
8. "It's a pool, and somebody's draining it, and now we can walk halfway to Thrumcap."
9. Clarice stopped short. "Oh, Steve," she said. "Oh, Steve; my Lord."
10. "How? You can't run a boat through the sand."
11. "Let's all walk out to Thrumcap and explore. We've never done that before."
12. "But if this is low tide--" Clarice hesitated. "What will high tide be like?"
13. "I think the tide won't be coming back in. I think the ocean must be drying up, or changing its basin, or something."
14. Stephen caught up with the lobsterman and said, "Morning, Paul." Dunham nodded to him. "Morning, Mr. Bell."
15. "Steve, they're driving cars out there." Clarice exclaimed.
16. "Right. That's what this vacation is all about. We'll drive to the ocean."
17. The surface he drove on was unbelievably smooth, and though he once in a while was obliged to go around upjutting rocks or to avoid genuine islands that rose ahead of the car, the experience was very much like that of crossing a shopping center parking lot.

Page 2

18. It was more than 200 feet to the bottom of the bluff--not a perpendicular drop, but at a perilously steep angle from where they stood down to what appeared to be a limitless dry plain.
19. It occurred to him that he had to go as far as he could go--as if something in him insisted that he find the _____.
20. "There's our first shipwreck," he said.
21. "Looking for the ocean?" he called down to Stephen. "It's all in here."
22. Stephen called to the man in the Bermudas. "Do you hear anything?"
23. He took a deep breath. "Listen, I think we'd better start back. It's about a hundred-and-forty miles to the Cape, but we ought to be able to get there just after dark."
24. "Tides come in gradually, don't they?" Clarice said in a tight voice.

A STAY AT THE OCEAN

(Robley Wilson, Jr.)

On the sixth day of his vacation in the old house on Perkins Point, Stephen Bell woke, as usual, at five-thirty. The sun was on the wall opposite the small window of the bedroom, though the room was still chilly. Birds in the meadow behind the house made unintelligible conversation, and the remoteness of the ocean's noise suggested that the tide was out.

He got up and dressed. His wife, Clarice, was snoring becomingly in his big bed, and he paused on his way to the kitchen long enough to look into his daughter Linda's room and see her curly blond hair nestled into the corner of one elbow. He felt a strong possessiveness toward both his women, and a kindness; he did not wake them.

In the kitchen he quietly poured himself a glass of orange juice, washed a vitamin pill down with it, then set out on his customary walk to the sea.

The summer place, a modest white building the Bells had rented through an agent in Damariscotta, had been built in the twenties nearly at the tip of the point. From its upper windows it provided a view of the Atlantic in three directions, and while the Point had very little sandy beach -- only a strip of some hundred feet along the southwest edge -- it had nearly three-quarters of a mile of shoreline along which Stephen could stroll in the early light. Rocks and split black ledges met the thrust of the sea with a kind of stubbornness, and brief reaches of lowland were strewn with coarse stones the ocean was rounding into its own toys. At the tip of the Point was something fairly worth calling a cliff; at high tide it dropped off five or six feet to the water; at low tide it became nearly impressive.

It was to the edge of this overhang that Stephen walked each day, to look at the sea and to assemble his private thoughts -- this morning no different from any other. He noticed that the tide was remarkably low. Rocks he had never seen before had risen up off the end of the Point; his cliff plunged down not to green water, but to an unfamiliar shelf of darker stone which sloped gradually toward open sea. This morning the nearest tidal pool was so far away that it took all his strength to throw a stone hard enough to reach and ripple the smooth surface. Thrumcap Island, nearly a mile out, was an unaccustomed high shadow in the morning fog, and a few yards out from the tiny beach the blue rowboat which had come with the house sat aground on damp sand; the rope from its bow looked ridiculous, as if the boat were anchored somewhere under the earth.

"What's going on?" Stephen said, half to himself, but loud enough to startle a single gull overhead. The gull, which had appeared out of the fog, glided back into it. Stephen threw a last rock after it and returned to the house.

He found Clarice getting breakfast. Linda, in pajamas, had just poured a bowl of dry cereal and was now spilling a pitcher of milk over and around it.

"Did you get your pill?" Clarice asked.

"First thing." Stephen sat at the table across from his daughter. "You ought to see how low the tide is."

"The moon's full," his wife said. "It was low yesterday."

"I know, but this is really low. I've never seen anything like it."

Clarice set a plate of eggs before him. "Coffee's coming," she said. "Lin, please honey, eat over the bowl."

"You could walk halfway to Thrumcap," Stephen said.

Linda looked up from her cereal.

"No kidding, Lin. Halfway to Thrumcap."

"What do you suppose it is?" his wife said.

"Don't know," his mouth full. "What you said, I guess. The moon."

"Daddy, does the moon make tides?"

"So they say. Clarice? It's so low I can't throw a rock to the nearest water. And the boat's high and dry."

"How does the moon make tides?" Linda persisted.

"Gravity," Stephen said. He winked at his daughter. "But you know what I think? I think this tide is too low for the moon to take credit for. I think the ocean is just a gigantic swimming pool, and somebody's draining it."

"Mother, is the ocean a big pool?"

"I think your father's teasing you." Clarice poured two cups of coffee and brought them to the table.

"You swim in it, don't you?" Stephen said.

"Everybody does."

"There you are. It's a pool, and somebody's draining it, and now we can walk half-way to Thrumcap."

Clarice frowned at him. "Drink your coffee, and stop feeding misinformation to eight-year-olds," she said.

Stephen patted his mouth with a napkin and pushed his chair back. "You think I'm making it all up," he said. "You come on and I'll show you."

By the time Stephen had jogged down to the Point, the two women trailing after him, the fog had begun to burn away and Thrumcap Island stood monumentally ahead of them. The sea had receded still further; now over the mile between the Point and the island only a few round pools of water were left. All else was a waste of gray sand and flattened black weed. The island looked as if it had been lifted onto a plateau of sand, rimmed with twisted tree roots.

Clarice stopped short. "Oh, Steve," she said. "Oh, Steve; my Lord."

"Is that something?" Stephen felt oddly as if he were taking credit for the phenomenon.

"Look at all the lobster traps!" Linda shouted.

Stephen looked. Where his daughter was pointing he saw a line of a dozen or so lobster pots mired in the channel about fifty yards out from the old shoreline. He started down the slope to the small beach.

"Let's have some lobsters," he called back.

"Steve, no. They belong to Paul Dunham."

He faced his wife. "But they'll just die, won't they? They won't be any good to anybody."

"Paul will get them."

"How? You can't run a boat through the sand."

"Then he'll walk. Stop showing your criminal side."

Stephen shrugged and came back.

"Aren't we going to have lobsters?" Linda said.

"We'll buy some, honey," Clarice told her. "Steve? Isn't this awfully strange?"

"I'll go along with that."

"I mean, this couldn't happen, could it? Are we just all having a dream?"

"You want me to pinch you?"

"Be serious, Steve." She sounded ready to cry.

He hugged her lightly. "I don't know, Clar. Yes, it's strange. It's impossible."

"Is it bad when the water goes so far away?" asked his daughter.

"No, Lin, it's just very funny. Very unusual and crazy." He looked at Clarice. "What do you want to do?"

"I don't know."

"Hey, I do. Let's all walk out to Thrumcap and explore. We've never done that before."

Linda danced. "Yes, let's."

"What if the tide comes back in?" Clarice said.

"Then we'll be marooned on the island and we'll hail a passing lobster boat."

"But if this is low tide --" Clarice hesitated. "What will high tide be like?"

"Slow. And we'll see it coming and run back to the house before it gets us." Stephen started down the beach. "Come on," he yelled, and his family followed after.

It was something like walking the edge of a usual beach, the sand packed hard, and the footprints of the three of them spreading into patterns of dryness as they walked. Except that there seemed no end to the beach. The sand patches of seaweed beginning to dry in the sun, and here and there a mussel shell or a black crab half-buried. The sensation of actually walking to Thrumcap Island was eerie. He had never landed on Thrumcap -- not even by boat. When they reached the island, he had to climb up to it, hand over hand, along and through the exposed roots of a tall pine, then reach down to pull Linda and Clarice ashore with him.

"It would be lovely to build a cottage out here, and just be isolated from everybody," Clarice said as they crossed the island.

"Would have been," Stephen agreed.

"Why say it that way?"

"I think the tide won't come back in. I think the ocean must be drying up, or changing its basin, or something."

"Are you serious?"

"I don't know. It doesn't make sense that this is just some fantastically low tide." They were standing now on the far side of the island, facing southeast. "Just look," he pointed out. "You can't even see the ocean."

He felt his wife's hand find his and squeeze hard. "I'm scared, Steve."

He put his other hand over hers. "Freak of nature," he said. "Let's walk back and see what's on the radio."

By the time they had started across to the Point, other figures were moving out from the old shore -- men and women, and a few children; some of them were carrying picnic hampers. Dogs pranced around family groups or clawed and nosed at objects half-submerged in the sand. Not far from his own beach Stephen saw a lone man plodding toward a lobster trap, pulling a high-sided wooden child's wagon behind him.

"There's Paul," Clarice said. "Why don't you see what he knows about this? I'll take Lin up to the house and try to get some news."

They separated. Stephen caught up with the lobsterman. "Morning, Paul."

Dunham nodded to him. "Morning, Mr. Bell." He was a thin, fortyish man, needed a shave, had water-gray eyes that looked out under a long-billed yachting cap. He had pulled on hip boots over his clothes; in the wagon Stephen could see a few lobsters moving sluggishly against each other.

"What's happening, Paul?"

"Can't say." He had come to the next of his string of traps, and had stooped to open it, drawing out a single lobster. He measured its carapace, then turned a perplexed look toward Stephen. "Don't know what to do with the damned thing," Dunham said. "Too small, but there's no place to throw the critter back to." He replaced the lobster in the trap and stood up.

"What's happened to the tide?" Stephen repeated.

Dunham gazed eastward. "Man up the coast told me it's gone out close to fifteen mile," he said. "Lives up on Pine Ledges. Owns a telescope."

"Will it come back in?"

Dunham picked up the handle of the wagon. "I got my waders on," he said.

Stephen made an awkward gesture of parting. "Happy fishing," he said, stupidly.

He met his women near the beached rowboat. "Anything?" he asked.

"There's nothing on the radio but bad music," Clarice told him. "We should have brought the little TV with us. What do you want to do?"

"Look what some people are doing, Daddy."

"Steve, they're driving cars out there," Clarice exclaimed.

It was true. Stephen could see a half-dozen automobiles moving out toward Thrumcap, and the Schumanns -- whose cottage was a few hundred yards northeast of theirs -- had actually piled into their truck-camper and had just now driven off the beach, threading between two grounded sailboats toward the east.

"Let's do that," Stephen said.

"Drive out there?"

"Why not? Obviously it can support the weight."

"It would be fun," Linda said.

"Of course it would. Let's pack a lunch and get into the car and go."

"But go where?" Clarice wanted to know.

"To the ocean," Linda said.

"Right. That's what this vacation is all about. We'll drive to the ocean."

Clarice finally agreed, and in an hour the Bell car, a white compact station wagon, was packed for the outing. Clarice had made sandwiches and filled a Thermos with coffee. Stephen had put in a six-pack of beer, along with some hamburger and a carton of milk -- all of it packed with ice in the metal chest. Linda had gathered together a careful selection of comic books and dolls. Almost as an afterthought, Stephen loaded the Coleman stove, and a five-gallon can of gasoline he had bought the day before for the outboard motor -- explaining to his wife how unlikely it was that they would be able to find either firewood or a gas station on the ocean floor.

"All set?" They were in the car, Linda curled in the back on a thin plaid mattress.

"All set," the women chorused.

Stephen was pleased that everything was turning out so well -- that what might in some families have become a fearful time, a kind of domestic disaster in the face of the unexpected, was now resolved into one more vacation sidetrip. Even Clarice seemed relaxed, though commonplace misgivings still plagued her.

"Do we have enough gas in the tank?"

"I filled it yesterday," he reassured her. "Cruising range: up to 500 miles."

"I hope nothing breaks down."

"Not a chance," Stephen said.

"Well," said his wife reluctantly, "just don't drive too fast."

It was easy to disobey her, Stephen discovered. The surface he drove on was unbelievably smooth, and though he once in a while was obliged to go around unjutting rocks or to avoid genuine islands that rose ahead of the car, the experience was very much like that of crossing a shopping-center parking lot -- every destination reached by the straight-line distance, with no attention paid to lines painted by developers or highway commissioners. And the ride itself was luxurious: no lumps, no curves to speak of, the tires against the gray sand making a sound like skis on dry snow. The further he drove, the fewer the obstacles became; even with the speedometer needle swaying between 70 and 75, Clarice made no protest.

Several cars passed him -- none of them closer than ten yards -- and the occupants of each car waved joyously and called out to the Bells.

"It's certainly a free-for-all," Clarice remarked.

"They're excited," Stephen said. "Nobody ever did this before."

"You couldn't even do this on television!" Linda shouted.

At the end of an hour-and-a-half of driving, Stephen was surprised to see a great number of cars -- thirty or forty, he guessed -- lined up about a mile ahead. They were stopped; the people in them had gotten out and were milling around.

"What's that all about?" Clarice asked.

"Maybe the road's washed out," Stephen suggested. He winked at his wife.

"You're so damned funny," she said.

"I bet it's the ocean," Linda said.

"Hey, I'll bet you're right." He slowed down and eased the wagon to a stop between two of the parked cars. "Okay," he said, "everybody out."

But it wasn't the ocean. Walking in front of the car, the three of them found themselves at the edge of a steep bluff.

"Wow!" said Linda. "Look how far down it is."

It was more than 200 feet to the bottom of the bluff -- not a perpendicular drop, but at a perilously steep angle from where they stood down to what appeared to be a limitless dry plain. The cliff consisted primarily of coarse rock, partly bare, partly encrusted with green and white shell-things. Deep crevices between the outcroppings of stone were filled with sand. The plain below seemed entirely of sand, and looked flat as a table top.

"We'll never get down there," Stephen said. He heard a touch of awe in his own voice.

"Quite a sight, isn't it?"

The words startled him; he turned and found himself facing a stranger -- a middle-aged man with rusty hair and plump chins.

"Incredible," Stephen agreed.

"There's a couple of quys down the line say they're going to try and drive a Jeep down to the valley. I say they're batty."

Stephen nodded soberly. "I should think so."

"Me and the wife, we're going to head south from here."

"Why south?" Clarice was asking the question.

The stranger hesitated and put out his hand. "Excuse me, folks," he said. "The name's Allen. We're out here from Des Moines."

Introductions were exchanged. Mrs. Allen, a dowdy facsimile of her husband, joined them.

Teacher Information Sheet

"We met this gentleman from New York," Allen told them, "says he used to study geology in college. He claims that if you drive a couple of hundred miles south -- down near Cape Cod, he says -- and then head straight east, you won't have to run up against this particular cliff. I don't know, but he claims he does."

"That's interesting," Clarice said.

"Says you can drive right out on this Continental Shelf he used to study about," Allen added.

Stephen looked at his wife. "Want to try it?"

"Are you and Mrs. Allen going to do that?" Clarice asked.

"Oh yes; we surely are."

"What for?"

"Curiosity, mostly," Allen told her. He seemed reluctant to say more.

"And the treasure," Mrs. Allen put in.

"Treasure?" Linda was suddenly interested.

"Oh, well, yes, we sort of thought we'd look around for a little sunken treasure." Allen shuffled uneasily as he spoke. "You know, all those old ships that went down -- oh, hundreds of years ago -- and up to now nobody's been able to find 'em. We thought we'd keep an eye out. You saw that old hulk on the way here?"

"No we didn't," Stephen said.

"Oh, we drove past it. Half-buried thing. No way to get inside it."

"But, we've got shovels in the pickup," Mrs. Allen said.

Allen began drifting away with his wife. "We'd better get started," he told Stephen. "Have a safe trip."

"Steve? Does that make sense? Finding sunken treasure?"

He gave a small, noncommittal gesture with his arms. "At this point, I'll believe anything. How about eating? It's way past noon."

"But we haven't seen any old hulks," Clarice said.

"Sure, but it stands to reason there must be some. There ought to be a lot of Second World War shipping scattered around somewhere, too."

"We haven't seen anything. Not even any dead fish, or those strange underwater plants you see pictures of. Why is that?"

He passed around sandwiches. "I suppose everything got buried under silt or swept out clean. This was some tide you know."

They ate. Stephen sat on the fender of the car, the sandwich in one hand, a beer in the other. As he gazed out over the edge of the bluff he marveled at how far he could see, and how little was to be seen. The horizon--how far away? Twenty? Thirty miles?--was as unbroken as the rim of a plate. God knew where the ocean was, what it was doing, how long it would recede from them. He shook his head, as if to wake himself up. Off to his right, a young couple in white deck-shoes was gingerly climbing over the edge of the cliff. He leaned forward to get a glimpse of the precipitous slope. The couple was picking black, withered plants out of a thin river of sand. They climbed back up, obviously delighted with what they had done. Off to his left, a small boy was sailing bottlecaps far out and down to the plain; the caps glided like odd birds. Where were the gulls and cormorants? he suddenly wondered. Following the elusive sea?

"Let's take that drive south," he said to his wife.

"Should we, Steve?"

"We won't get lost. I'll move in so we can see the shore on the way down."

"We ought to go back to the house first, don't you think? Maybe we should get the tent and some more food."

"No", he said, "let's be really adventurous. There's food enough for breakfast, and we can sleep in the car if we have to."

It occurred to him as he backed the car around and set a course for the southwest that he had to go as far as he could--as if something in him insisted that he find the ocean. He rationalized the insistence in two ways: first, the ocean was what he had left Cleveland for, and he refused to be deprived of it after fifty weeks of slaving over his drafting board; second, he certainly wanted to be able to tell his friends, first-hand, what that Great Tide business had been all about. I was there, he could say. I was part of it.

"Now there's land in front of us," Clarice was saying.

He had been driving for two hours since lunch, making good time as before, except that there had been considerable cross-traffic to keep him alert--cars, campers, motorcycles, all moving madly east. He had kept the New England coast in sight most of the way--the old coast.

"Let's go ashore and see where we are," he said.

What he had in mind was to stretch his legs in some kind of normal place, to find restrooms and buy gas, to keep his ears open for any news sifted in from the larger world. The landfall turned out to be the Gloucester peninsula and Stephen was able to drive up out of the ocean bottom across a pebbled beach not far from a paved highway. In the nearest town he pulled into a gas station. Reading a road map while a sullen young man filled his tank, Stephen concluded that the town was Rockport, and he tried to estimate--referring to a sun that was by now halfway down the sky--which direction to set out in to avoid driving into Cape Cod Bay.

In twenty minutes they were on their way southeast; the attendant had refused to honor his credit card--another driver at the station had complained loudly--and Stephen had paid what seemed an unusually high price for the gas. Frightened. Stephen decided: taking the cash while he can.

He drove casually and fast; he was getting used to this sort of travel, to the experience of other cars strewn as far as the eye could see in every direction.

"It's something like an old-fashioned land rush," he said to Clarice.

"I suppose," she said. "Did you hear any news at the gas station?"

"Rumors, is all."

"Well, like what?"

He pursed his lips. "Silly things. Some guy told me he'd heard most of Europe was under water."

"My God, Steve."

"Oh, come on, Clar. That's hardly likely, you know."

"I don't know." She slouched into the corner by the door. "The water must have gone somewhere."

"Believe anything you want. Maybe it's Judgement Day."

His wife kept quiet.

Of course it was possible--that wild story about Europe. It was strangely logical, Stephen admitted. Still, fantastic. How could you explain it? A shift in the magnetic poles, maybe. Or a meteor--something huge--hitting the earth with incredible force. But wouldn't there have been earthquakes? He mused, scarcely thinking about his driving--not needing to. There were no obstructions, nothing to slow down for.

"I can't say much for the scenery," he said.

"Daddy, my stomach hurts," Linda complained.

He glanced at his watch. It was after six o'clock, he was amazed to notice; he had lost track of time since leaving Rockport, and surely his daughter had a right to be hungry.

"Be patient, honey," Clarice said in a tone part soothing, part mocking. "Daddy will stop as soon as he finds a nice shady spot."

He smirked. "Now that's funny," he said, yet almost at once he was startled to see something black on the horizon. He pointed. "What do you suppose that is?"

Closer, he identified the object.

"There's our first shipwreck," he said. It looked, as he drew toward it, to be a modern ship--metal-hulled, at any rate--stern up as if it had dived sharply to the bottom. Second World War? Victim of a submarine? Its enormous square plates were deep red with rust, and its unexpected presence made the miles of sand around it all the more desolate. Circling to the ship's shady side, he saw that two other cars were parked alongside it.

"Company," he said.

"That's good," Clarice decided. "You'll have somebody to talk to while I get supper."

Stephen parked and got out. People from one of the cars had spread a cloth under the lengthening shadow of the hulk. A man appeared on top of the wreck and peered down over the crusted railing, hanging on to keep his balance against the rake of the deck.

"Looking for the ocean?" he called down to Stephen. "It's all in here." He pointed toward the submerged bow. Leaving the women to fix the hamburgers, Stephen walked around the ship and made his way precariously up the steep deck. "I think it must have been a tanker," the man above him said.

"Torpedoed?"

"I expect so." The man wore Bermudas and a Hawaiian shirt; he grinned at Stephen. "Makes you feel like Davy Jones, doesn't it? I looked into that hatch down there. Couldn't see anything, but I could hear water sloshing. Bet there's a lot of bones rolling around in there; poor bastards."

Stephen nodded. He didn't feel like talking, but stayed on the ship, bracing himself against a ventilator. To be above the ocean's floor was pleasant; the air was warm and windless; he even enjoyed the difficulty of keeping his balance, after hours of cramped driving.

Certainly this had been the most remarkable day of his life--of all their lives--and filled with small wonders. The lobsterman pulling his coaster wagon. The foolish couple from Iowa with their shovels and dreams of treasure. The boy and girl at the cliff, acting like honeymooners picking edelweiss in the Alps. And the ocean. The ocean he had grown used to in summer after summer of holidays in Maine--suddenly turned into a desert. Still--he felt a faint shiver of apprehension. If there was water in the hold of this broken tanker--

He edged his way to the open hatch, a gaping black hole in the rust and scale of the deck-plates, and tried to see inside. It smelled like ocean, he thought. He listened, and could hear the water. Why should it be moving? Stephen stepped off the hulk and looked around. Nothing--but was that fog, far off to the east.

Stephen called up to the man in Bermudas. "Do you hear anything?"

"No," the man said. Stephen noticed a car about a mile away, headed west. "Wait a minute," the man said. "I do hear something."

It was the sound he had awakened to that morning--of the tide, far, far out.

"By George," the man said, "I think we've found her at last." He stumbled down from the deck. We've caught up with her," he said, and went to tell his family.

Stephen walked back to the women.

"Not ready yet," Clarice said. "Why don't you open a can of beer?"

He took a deep breath. "Listen, I think we'd better start back. It's about a hundred-and-fifty miles to the Cape, but we ought to be able to get there just after dark."

Clarice tensed. "What is it?" she said.

-----STOP-----

"I just think we'd better go. It's been a long day."

His wife turned off the stove and dumped the meat onto the sand. "Linda, get in the car."

"Don't we get to eat anything?"

"Linda, honey, don't quibble with me." She glanced around. The two neighboring cars were gone. Other cars appeared from the east and sped past.

"I'm going to put that spare gasoline in the tank," Stephen said, "just so we won't have to stop."

As he worked, he could hear the soft, incessant whisper of waves at his back. He made a botch of pouring the gas. Steady, he told himself. It's your own damned fault.

When he finished, the women were inside, waiting. He tossed the gasoline can away in a high, tumbling arc, and hurried to get into the car. The sea noise behind them was by now so loud that he could hear it even above the engine as it burst into life. He shifted into first gear and skidded forward.

"Tides come in gradually, don't they?" Clarice said in a tight voice.

"Usually," Stephen said. He threw the shift lever into second; again the rear wheels of the station wagon spun, as if the sand under them were getting wetter.

"I just can't believe any of this," his wife said. She leaned her head against the back of the seat and closed her eyes.

Now he was in high gear. The engine was turning over smoothly and the speedometer needle stood unwaveringly at seventy miles an hour. Ahead of them the evening sun was sliding down to the horizon; he kept the car headed toward it, squinting across the enormous reach of gray sand. What a queer thing, he thought. What a devil of a way to finish a vacation. He was aware all around him of other cars, other driver,

Teacher Information Sheet

all racing west on this incredible aimless track. One car passed him, then another, and he pushed the accelerator down. He overtook a white camper and swerved around it; the station wagon fishtailed slightly.

"What's the matter?" His wife opened her eyes.

"Nothing's the matter."

"We won't run out of gas now, will we?"

"Not a chance." He watched the needle slide past eighty. The sand was glistening ahead of him, water seeping to the surface. The tide must be racing in behind them. Could they swim free? Where would they swim to?

"Daddy!" The scream startled him. "Daddy, I can see it! I can see it coming after us!" Linda wasn't crying. In the rearview mirror he could see her face, half-turned in his direction, her eyes vivid, her mouth working desperately to make more words. Out the back window he could make out a low gray wall that seemed to be gaining on him. Under his wheels he could hear water splashing, see spray flying. He switched on the wipers.

He reached over and squeezed his wife's hand. At least we're all together, he thought. Off to the right he saw an overturned car, two men and a woman out trying to turn it upright. The sun was almost at the horizon and its light cast back a hundred rainbows through the wakes of a hundred cars. A pale, pebbly mist began forming on surfaces inside the car. The roar of the impossible tide was deafening; it seemed now to all around him, and the deepening water drummed like hammers against the metal under the car. He was thinking irrelevantly of how quickly the salt sea would rust out the fenders and rocker panels when he heard Clarice for the last time shrieking:

"Drive, Steve, drive. For pity's sake, drive, drive, drive!"



ACTIVITY 2:

OUR RELATIONSHIP TO THE WORLDS WATER



(1 day)



ACTIVITY 2: OUR RELATIONSHIP TO THE WORLD'S WATER (1 day)

- CONCEPTS:** Our world is a water planet. There are many different perspectives from which to view the sea.
- OBJECTIVES:** Students will learn information about the marine environment pertinent to the literature that follows:
1. the extent to which ours is a water planet
 2. define terms used in activities that follow.
 3. students will understand that the sea can be viewed as both a friend and enemy under various conditions.
- TEACHER PREPARATION:**
1. Duplicate quiz and student reading, "Excerpt from Introduction to Marine Education".
 2. Prepare diagrams for board or overhead projector.
 3. Locate record "La Mer" by Debussy (or suitable alternative).
 4. Read T.I.S. "La Mer"
 5. (Optional) Locate The Sea Around Us by Rachel Carson (Young Reader's Edition)
- MATERIALS:**
- Class set of:
1. Student quiz
 2. Student reading - Introduction to Marine Education
 3. Record, "La Mer"
 4. The Sea Around Us. (Optional)
 5. Film: Sense of Wonder (Optional)
- PROCEDURES:**
1. Students take quiz.
 2. Correct quiz and discuss answers. Show diagrams as you discuss 3, 4, 6.
 3. To establish that our world is a water planet,
 - a. Teacher, either read excerpt from Introduction to Marine Education and if possible show picture of earth from space, or use as a student reading
 - b. The teacher may want to read aloud and discuss Ch. 1 (or excerpt from it), "The Gray Beginnings" from Rachel Carson's The Sea Around Us (Young Reader's Edition) or show film, "A Sense of Wonder"
 4. Read Teacher Information Sheet. Lead discussion about different perspectives from which to view the sea:
 - a. Teacher: The list of facts about the world's water and man's relationship to it is awesome. However, there are many other perspectives from which to view the sea. Briefly discuss students' experiences with or reactions to the sea.
 - b. Have the students each list 5 adjectives to describe the sea or their feelings about the sea. Go around the room and have each student write his word on the board. Go around again and give another word from your list that isn't already there.

c. Discuss the list and variety of ways to view the sea. We see it as both familiar and mysterious, friendly and dangerous, challenging and unconquerable, calm and turbulent. Allow students to think about and comment on that observation.

d. Ideas to include:

It is constantly being reshaped by wind and weather; hence it is unpredictable and fickle. But in spite of this, we find a reassuring sense of serenity in the eternal rise and fall of waves and ebb and flow of tides.

It is the embodiment of such contradictions as power and violence, beauty and calm. It is perhaps the mystery and beauty of the sea that have prompted so many people to record their feelings about it. The sea is an alien environment to man not just because we would drown if submerged in it, but because it is an unstable element compared to land.

e. Herman Melville, the author of the great sea story, Moby Dick, wrote "There is, one knows not what sweet mystery about this sea, whose gently awful stirrings seem to speak of some hidden soul beneath." (Ask students to comment on meaning of "gently awful.")

Musicians have composed music, artists have painted pictures, and writers have written poems, short stories, and novels about the sea.

f. If you were to express your feelings about the sea in music, how might it sound? (Teacher, list student contributions on the board, such as loud, soft, gentle, wild, strong, fast, slow, heavy, peaceful.)

g. Explain that you will play a musical composition (La Mer) about the sea while they write the following paragraph.

ASSIGNMENT:

5. Write a paragraph beginning with one of these sentences:

"The sea is a friend to man because . . ."

"The sea is an enemy to man because . . ."

EXTENDED ACTIVITIES:

Students will pick one perspective and explain why it is so.

Show film "Sense of Wonder" - see bibliography

Diagram #1

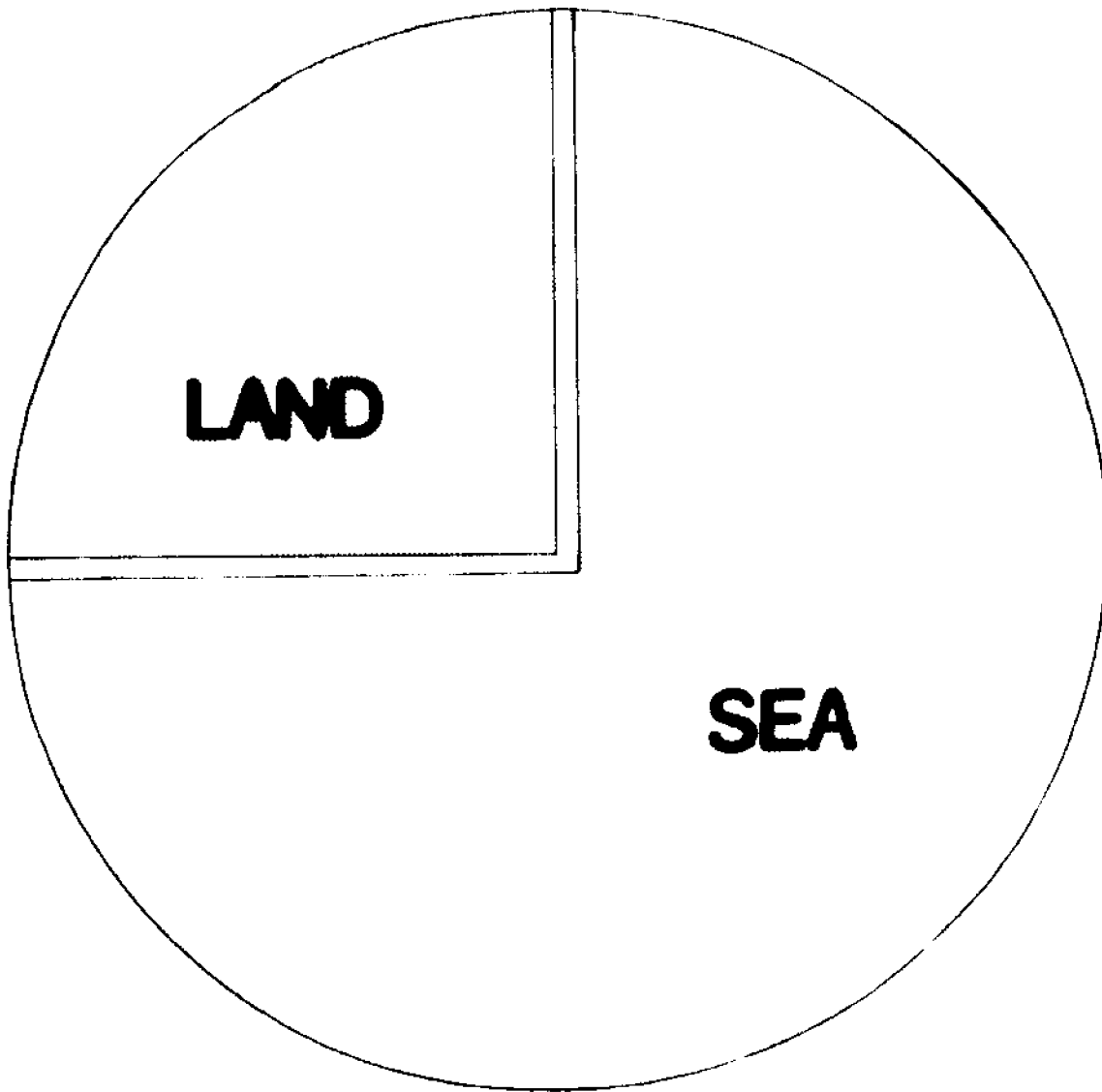


Diagram #2

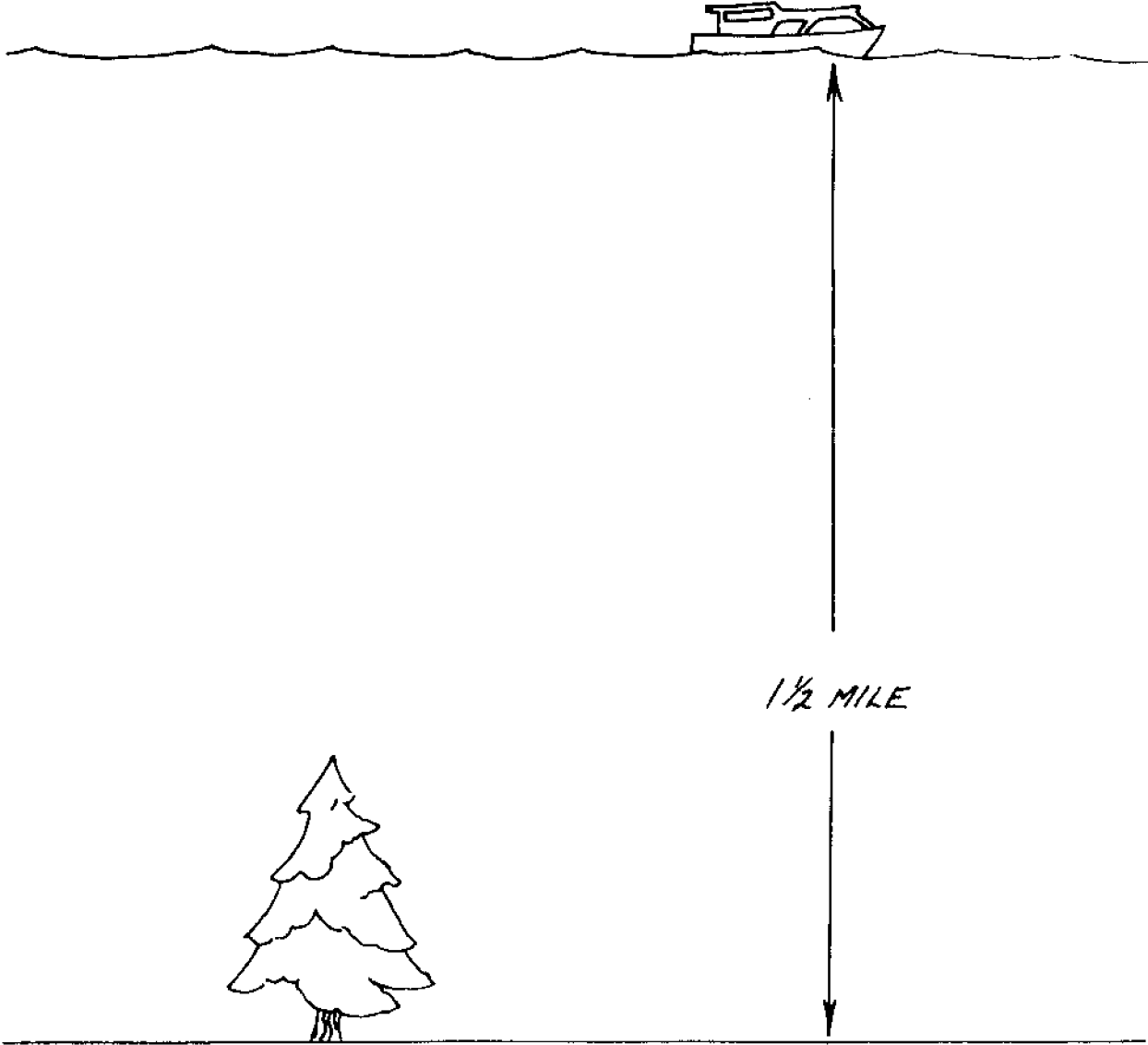
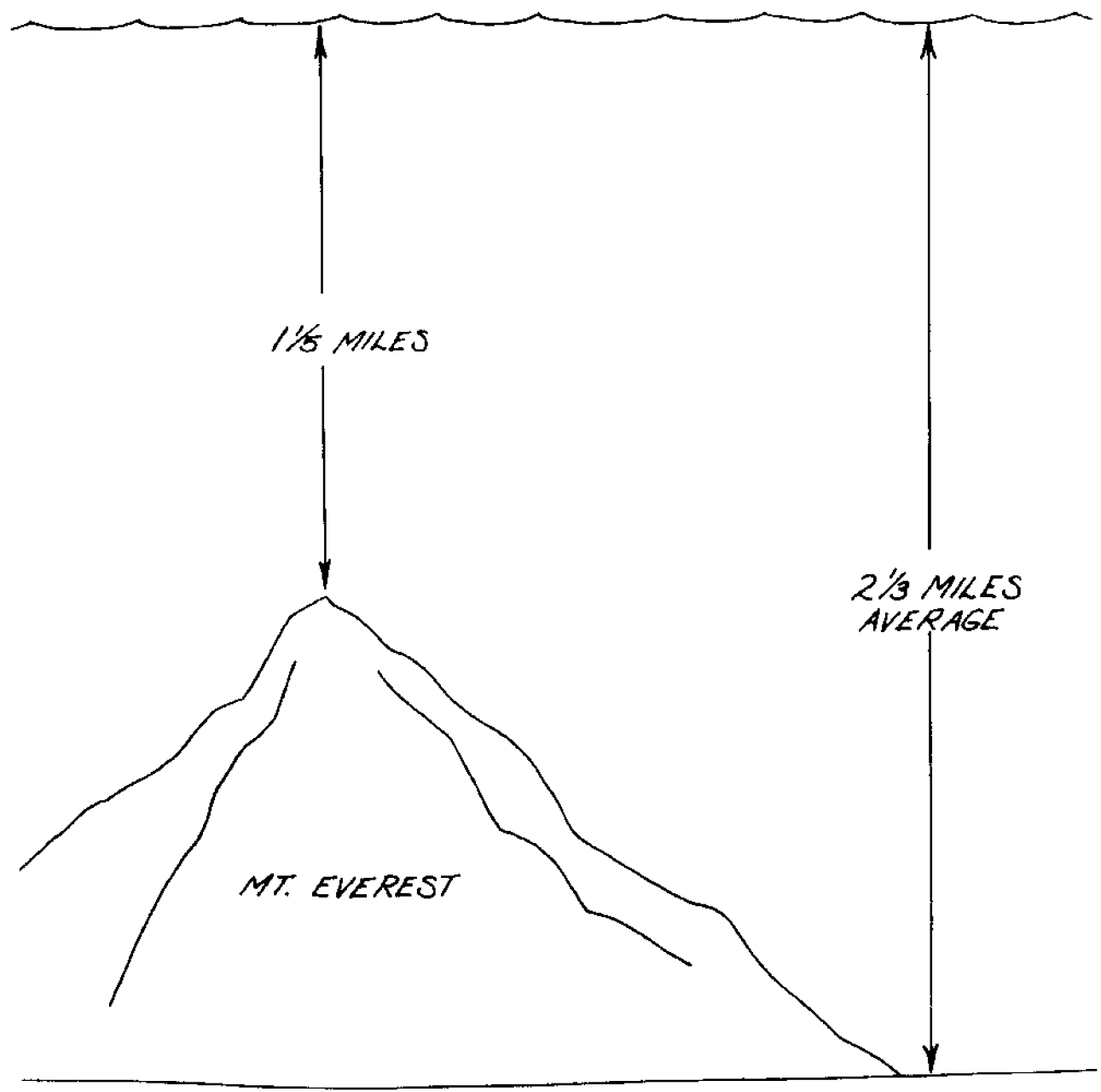


Diagram #3



DEBUSSY: "LA MER"

from Columbia Records
notes by Charles Burr

Of the first of the three movements, "From Dawn to Noon on the Sea", Donald Ferguson once wrote: "We shall feel the rising of the wind and shall sense the imperceptible growth of something like sentient life in the sea itself."

Again, in discussing the second section, "Play of the Waves," he writes: "There is again, and in greater measure, a hint of life actually imminent in the waves, and it takes little imagination to imbue with something more than physical force the joyous tumbles."

What Ferguson is hinting at here is the animistic idea that the various aspects of nature - the sea, the wind, growing things, rocks, trees, etc. - all these possess a spirit, even as humans do. It is this spirit, this life in the sea, which seems to waken at dawn, to sport with the wind, to taunt and beckon and sometimes kill.

This concept is an ancient one, in favor in classic times more than in our own. In this time, we have the somewhat contemptuous idea that by grasping the nuclear structure of an element and giving it a name we have solved it: e.g., oxygen. We go on to make it perform for us, and it is our slave.

There is even a name - "oceanic sensations" - given to the sense of awe and vastness that we feel on the beach, given only the sea to look at and be with.

But to give a thing a name is not to own it, and the sensitive, animistic appreciation of an element is as right as or righter - and vastly more comforting - than the technological. The sea may be chemicals and water, but the man to whose blood it does not speak is dead.

Debussy's approach to the sea, his lifetime friend, is as far from the mechanistic as it is possible to be. Therefore the music does not at all respond to dead analysis, to thematic descriptions and the like. It is vaguely in cyclical form, but even that is unimportant. Musical technology cannot account for the triumphs of the score, for they are triumphs of the believing imagination.

Debussy does not paint here. He does not make us see the sea, but feel it. This is the greatness of it. Lawrence Gilman wrote:

"No one had done this before in music; no one had stood at so far-flung an outpost of the perceptive mind and reported these mysteriously burdened winds, these tides so incalculably rhythmed, these fantastic and cream colored landscapes, these murmuring voices of desire, the passionate, grave gestures of these enigmatic beings, of some unknowable and hidden land. This was Debussy's special contribution to creative music. He enlarged the boundaries of its imaginative world, the

Debussy "La Mer"

extent of its awareness, the scope of its expression. He taught it to speak, with unexampled fidelity and beauty and profundity, of things for which there are no words."

EXCERPT FROM: "INTRODUCTION TO MARINE EDUCATION"

The most dramatic and revealing results of the Apollo moon missions may turn out to be the series of photographs of earth taken by the astronauts from space and the lunar surface. For the first time in human history we are shown our home world in perspective. The impression is of a blue-green globe, the world of blue water partly concealed by lovely patterns of water vapor, clouds that mark the movement of weather systems. Especially in the Polar regions, there is the white glitter of frozen water. Showing through breaks in the cloud patterns are the continents, brown and green shapes dwarfed by the blue of the oceans.

As the turning earth is observed during a 24-hour cycle, it becomes evident that the continental masses occupy less than a third of the surface. In spite of their size, in human terms they are islands in a global sea. It is the global sea that gives earth its character, connecting the shorelines of all the land masses, storing heat that moderates climates even in the northern reaches, and providing the essential moisture that makes the life of the biosphere possible.

From the perspective of the moon, the identification is clear:

Earth is a water planet.

ACTIVITY 3:

PERSONAL SEA EXPERIENCES

(1 day)

ACTIVITY 3: PERSONAL SEA EXPERIENCES (1 day)

- CONCEPTS:**
1. Our own personal experiences provide different perspectives from which to view the sea.
 2. The sea environment is a rich subject for literature.
 3. Poets often use sensory words to recreate experiences similar to our own.

- OBJECTIVES:**
- Students should:
- 1) Recognize and appreciate the value of our own experience as perspective's from which to view the sea and as subject matter for writing.
 - 2) Read with understanding several poems.
 - 3) Understand and appreciate the poet's attempt to create "word pictures" in our mind by using words that call on the senses--sight, hearing, smell, touch, taste.
 - 4) Apply this technique to their own writing about a personal sea experience.

**TEACHER
PREPARATION:**

1. Locate record of whale sounds (available at Pacific Science Center)
2. Locate film: Sperm Whale (optional)

MATERIALS:

- Class set of:
1. Teacher information sheet - "Summer Song"
 2. Student hand-outs - "Carmel Point" and "Whale Song"
 3. Record of whale sounds
 4. Film: Sperm Whale (optional)
 5. Photographs, shells, driftwood, pictures (optional)

PROCEDURES:

1. Lead a discussion of personal sea experiences.
Suggestions: Perhaps some of us, living so near the water, have tried to capture and record our reactions, experiences and feelings about the sea. How many have ever taken a photograph at the beach? Of what specifically? (Bring them to class.) Teacher may show pictures.

How many have brought some part of a sea experience home with them? Why? Shells, driftwood, rocks, seaweed? What did you bring? (Bring to class.) Teacher show examples.

Have any of you been moved to tell someone else about an experience you've had at the beach or in the water? Did you write them a letter or tell them in person? Perhaps it was a scary adventure in a boat or swimming? A winter storm with waves crashing? A fish story about the big one that got away? Or just the sound of soft waves washing the shore while you lie on the warm sand.

If you were writing to make it seem real, you would have had to use words that call on the senses--sight, hearing, smell, touch, and taste.

2. From the discussion, list on the board some sea experiences. (Keep list for future reference.) Examples:
 - a. clamming & beachcombing at low tide
 - b. walking or lying on hot sand
 - c. chasing waves
 - d. making sand castles
 - e. swimming
 - f. boating
 - g. fishing
 - h. storms
 - i. waves crashing
 - j. riding the ferry

3. Present poems
 - a. "Summer Song" on overhead projector. First explain that "Summer Song" is light verse and students can fill in the missing words as you read aloud.
 - b. "Carmel Point"-students read silently, then aloud. Discuss: What "sense" words does the poet use? Which words make you feel? Hear? Smell? Taste? See? Circle those words.
 - c. "Whale Song"-Play record of whale sounds while students read poem silently. Then read poem aloud and answer questions.

4. Students write a paragraph about a sea-related experience (may select from list on board)appealing to at least 3 of the senses.

**EXTENDED
ACTIVITIES:**

1. Show film: "Sperm Whale" by Jacques Cousteau.
2. Allow students to display and tell about pictures, collections, etc. from the sea. For ideas and directions for "beachcomber" projects (mobiles, collages, windchimes, shell sculpture) see the Beachcomber Book listed in bibliography.

SUMMER SONG

By the sand between my toes,
By the waves behind my ears,
By the sunburn on my nose,
By the little salty tears
That make rainbows in the sun
When I squeeze my eyes and run,
By the way the seaquills screech,
Guess where I am? At the!
By the way the children shout
Guess what happened? School is!
By the way I sing this song
Guess if summer lasts too long:
You must answer Right or!

--John Ciardi

NAME _____

DATE _____

PERIOD _____

CARMEL POINT

I watched a sea anemone
The color of green jade
Shadowed under water.

I saw a daring crab,
Unafraid and young
Touch the velvet petals
Of that princess under water.
Softly she took him in,
Softly she sighed and closed.
The little crab was hushed and still--
Never would he swim again
Under crevice, under weed,
Under green and colored water.

Softly she opened--
That princess of rare jade.
Softly she gave him back
Sucked of all his pearly flesh
Sucked of all his salty blood.

I ran away to tell my dad,
"Let's go home," I said,
"I am sorry to be born,
I am afraid of many things."

--Margaret Phyllis MacSweeney

Teacher Information Sheet

NAME _____

DATE _____

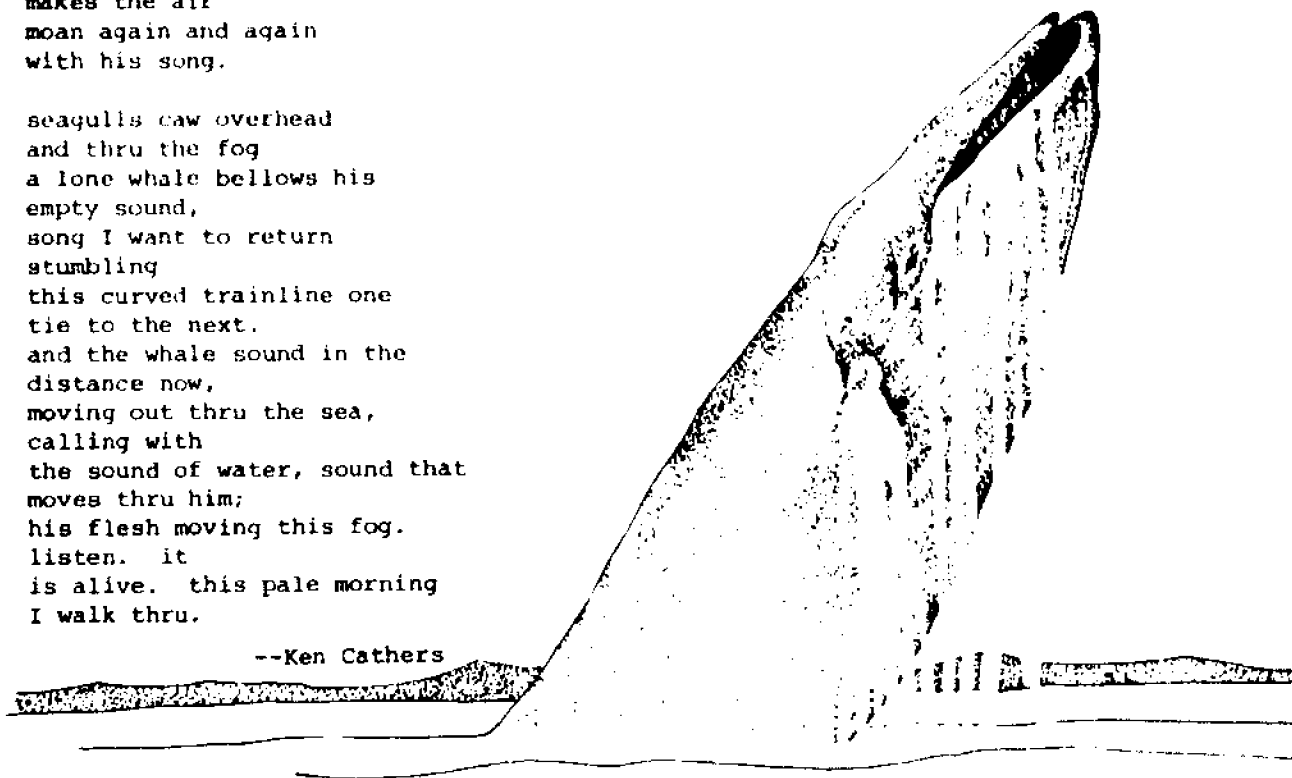
PERIOD _____

whale song

and walking the tracks above
 the harbour
 I hear a lone whale call
 thru the morning,
 call from the fog that is
 heavy with salt,
 the raw smell of clamflats
 below.
 thru the fog, covering
 transparent
 as water, the whale calls,
 makes the air
 moan again and again
 with his song.

seagulls caw overhead
 and thru the fog
 a lone whale bellows his
 empty sound,
 song I want to return
 stumbling
 this curved trainline one
 tie to the next.
 and the whale sound in the
 distance now,
 moving out thru the sea,
 calling with
 the sound of water, sound that
 moves thru him;
 his flesh moving this fog.
 listen. it
 is alive. this pale morning
 I walk thru.

--Ken Cathers



"Whale Song" from Whale Sound, ed. J.J. Douglas, Prism International.

"Whale Song"
Study questions

1. What is the setting for this poem? (time and place)

2. Describe this place using the senses. How does it feel, look, taste, smell, sound?

3. What are two kinds of sounds the poet says the whale makes?

4. How does the poet react to hearing the whale song?



ACTIVITY 4:

FERRIES OF PUGET SOUND



(2 days)

ACTIVITY 4: FERRIES OF PUGET SOUND (2 days)

CONCEPTS: Even as common an event as a ferry ride can be viewed from different perspectives.

OBJECTIVES: Students will:

1. Be familiar with Puget Sound geography necessary to understand the literature that follows.
2. Recognize the uniqueness of Puget Sound geography.
3. Understand literary techniques used by these writers.
4. Increase vocabulary.

TEACHER PREPARATION:

1. Collect materials - see list below
2. Duplicate maps of Puget
3. Duplicate student handouts - Untitled Ferry poem (2 pages) and "Night Run to Winslow" (3 pages)
4. Locate the places mentioned on a map before doing activity.

MATERIALS: Student copies of:

1. Ferry schedules for Puget Sound
2. Blank Puget Sound maps
3. Student handouts: Untitled Ferry Poem
Night Run to Winslow
4. Map of Puget Sound (wall map or transparency of teacher information sheet - map)
5. Dictionaries for student use.

PROCEDURES:

1. Pass out blank maps of Puget Sound and have students, working in pairs, label as many of the following features as they can:
 - a. Puget Sound
 - b. Straits of Juan de Fuca
 - c. Elliott Bay
 - d. Lake Washington
 - e. Hood Canal
 - f. Olympic Mountains
 - g. Whidbey Island
 - h. Bainbridge Island
 - i. Vashon Island
 - j. Kitsap Peninsula
 - k. Seattle
 - l. Edmonds
 - m. Winslow
 - n. Bremerton
 - o. Tacoma
 - p. their hometown if not one above
2. Display transparency or point out on wall map the correct locations - students complete maps accurately.

3. Lead discussion in preparation for student handout:
 - a. How many of you have gone for a ferry ride? Where?
 - b. Between what points can you go on Puget Sound by ferry?
 - c. Distribute ferry schedules and allow students in pairs to figure out how to read them and answer.
 - d. Use map to draw routes and illustrate on overhead projector or each student draw 1-2 routes on his own map.
 - e. How many times each day do the ferries go back and forth? (See schedule.)
 - f. What does the word "run" mean when referring to ferries?
 - g. For someone who is seeing one of our Puget Sound super-ferries for the first time, what might be his first impression--in a word? (BIG!!)
4. Pass out Student Handout "Untitled Ferry Poem." Discuss questions on worksheet and allow students to read poem silently and answer questions. Then read aloud together and discuss.
5. Pass out Student Handout, "Night Run to Winslow," page 1 and do vocabulary, seeing who can look up words first. Pass remainder of worksheet. Read the story.

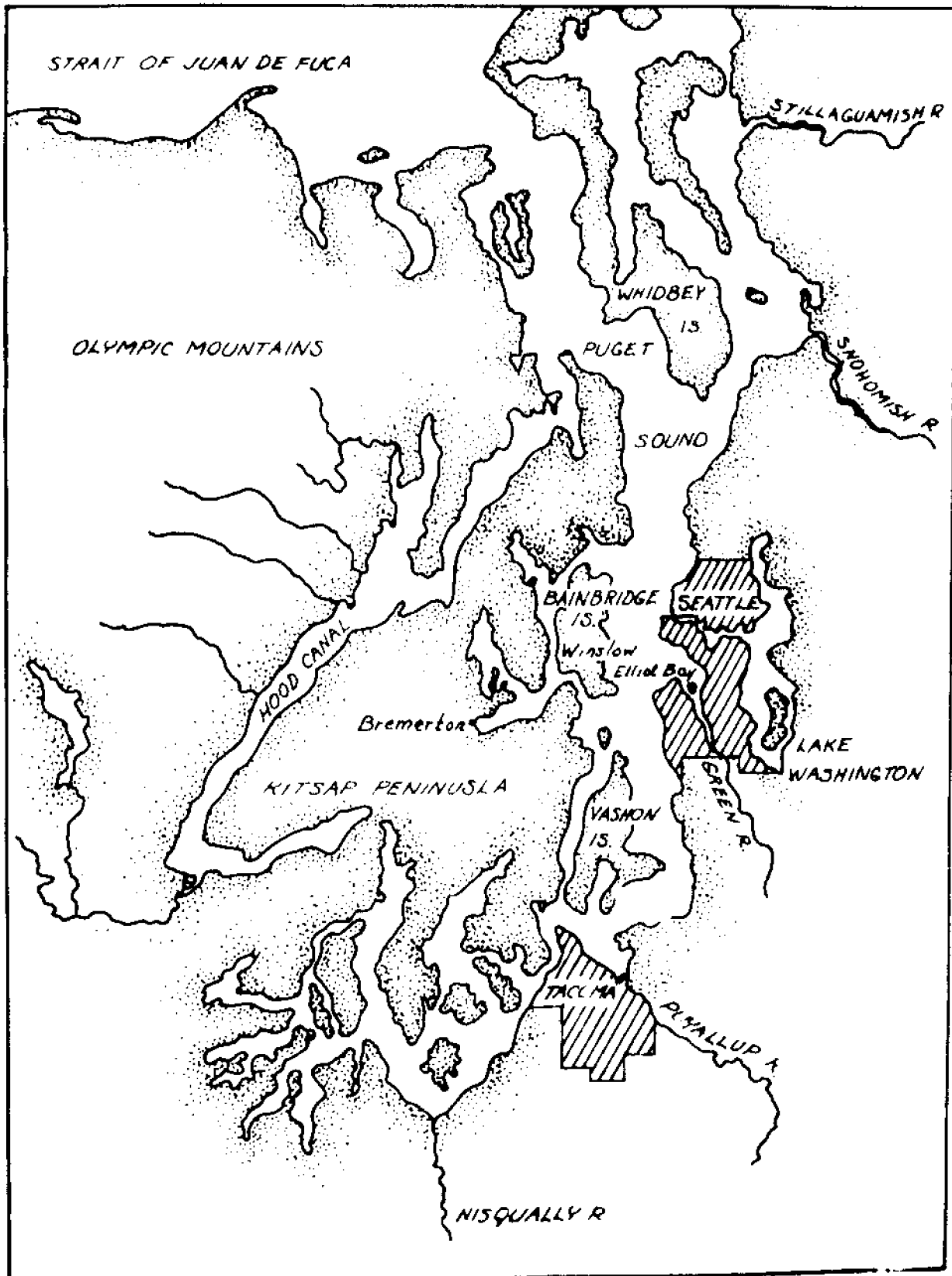
Discuss thought questions.

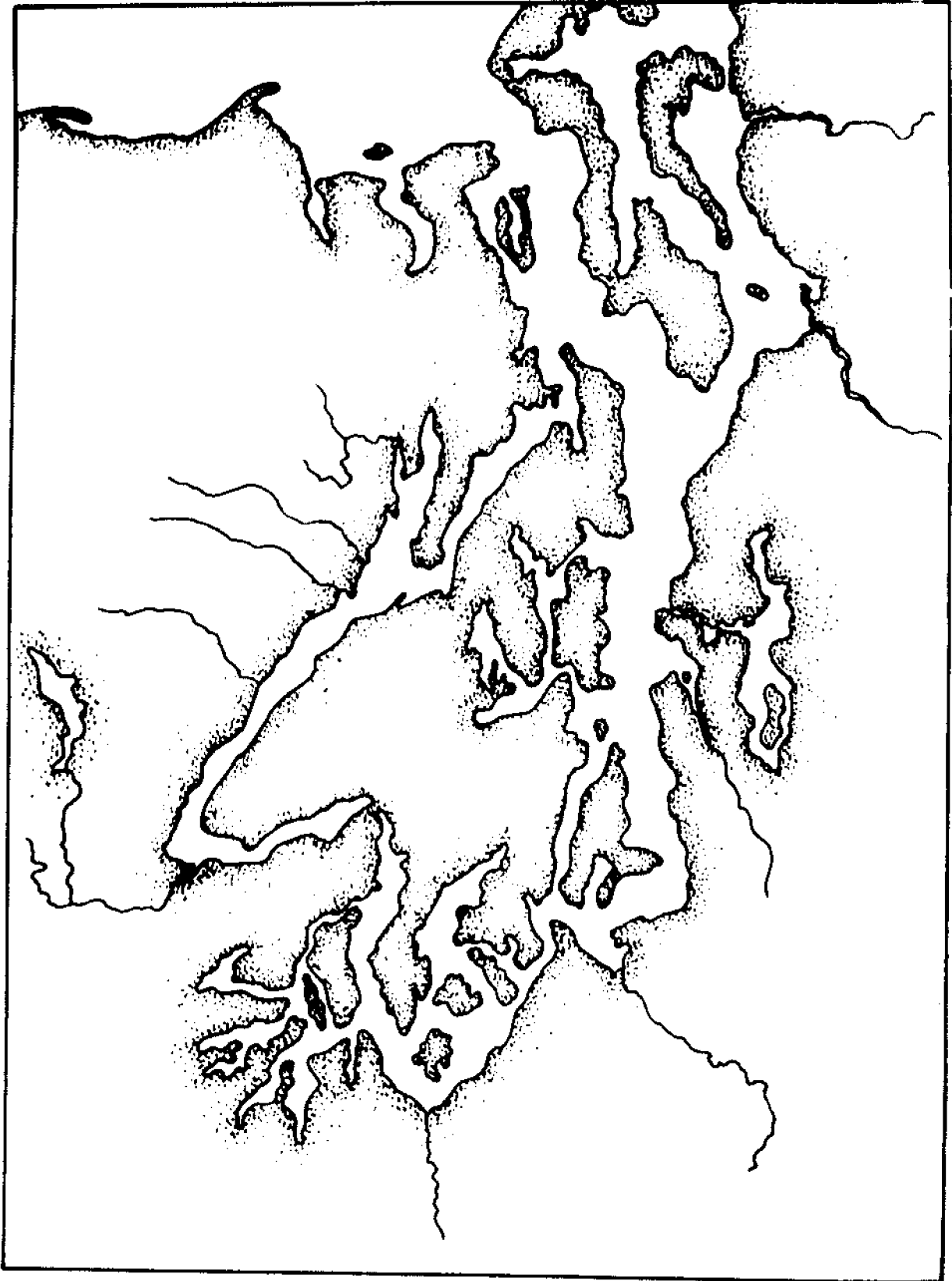
ASSIGNMENT:

6. Write a newspaper article reporting the same event depicted in the story, "Night Run to Winslow". Include a front page headline as it might appear in the Seattle Times.
7. Teacher may wish to read a few short newspaper articles as examples of a reporter's style.

EXTENDED ACTIVITIES:

8. Take a ferry ride!





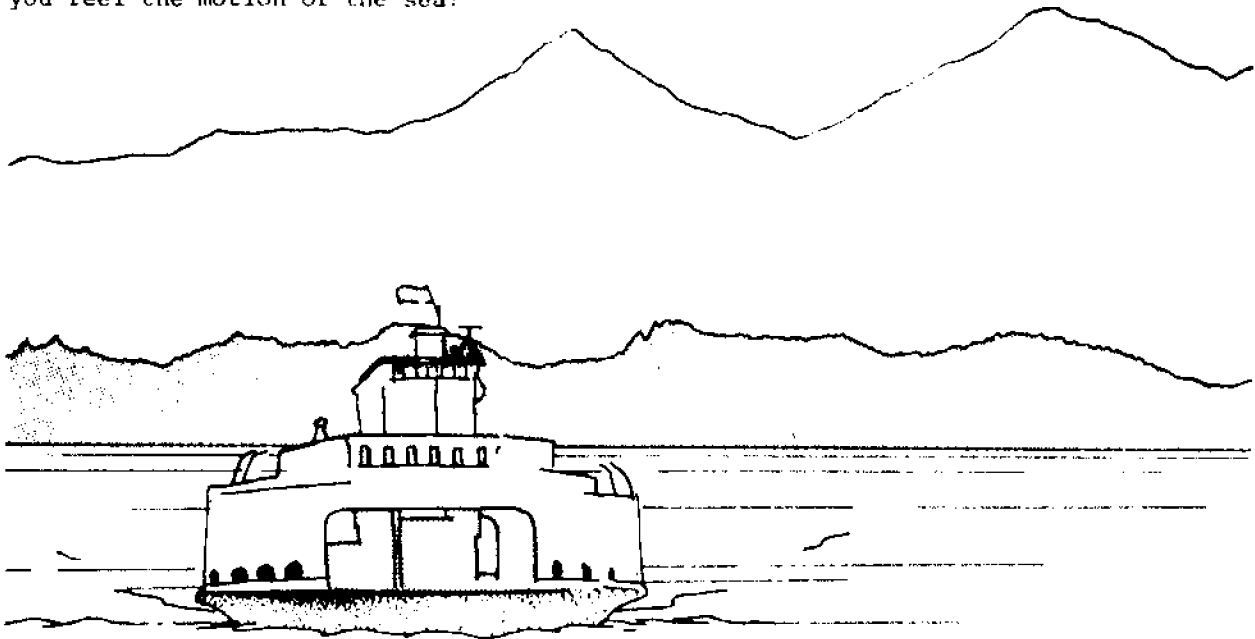
Untitled Ferry Poem

NAME _____

DATE _____

PERIOD _____

A sea-related experience many of us have had is a ferry ride across Puget Sound. Thought questions: What do you pass and see and hear? Does the ferry go fast or slow? Is the ride short or long? Is it interesting, exciting, boring, fun? Do you feel the motion of the sea?



i often take this run -
 that's what we call it here -
 back and forth across the sound.
 over here's olympics
 and city blooms out there
 so busy so busy
 i go this way just to watch the view
 everyday, so different
 back and forth across the sound.
 that's the yakima
 and there's the klikitat
 rocking in rocking out rocking
 the trips i've been on killing time -
 it's never killed the thrill of it
 back and forth across the sound.
 over here's olympics
 and city blooms
 forth and back so busy so busy

--michael lieb

Student Handout Sheet
Untitled Ferry Poem (continued)

Study questions to answer:

1. What is one reason the poet rides the ferry?
2. What emotion does he experience on the ride?
3. With what words does the poet try to make you feel the motion of the ferry?

Does it work for you?

4. What unusual grammar and punctuation does he use?

Student Handout Sheet
"Night Run to Winslow"

NAME _____

45

DATE _____

PERIOD _____

Vocabulary to know before reading this story:

1. anticipation _____
2. docile _____
3. vaguely _____
4. phosphorescence _____
5. billows _____
6. descends _____
7. exhilarated _____
8. emerges _____
9. silt _____

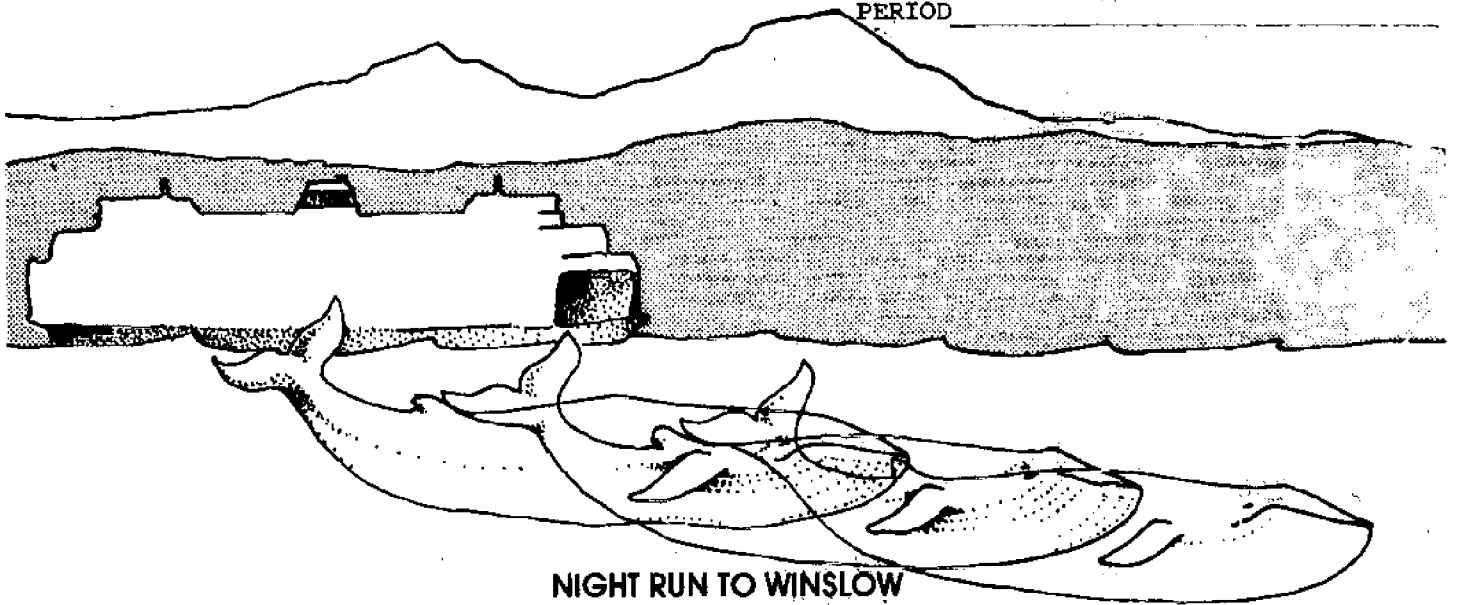
Thought questions:

Have you taken a ferry run at night? How was it different from a day ride? What did you see or hear or feel about the ride that was different? Where is Winslow? What is a "pod" of whales?

NAME _____

DATE _____

PERIOD _____



NIGHT RUN TO WINSLOW

by Terry Lawhead

The ferry is bored. It's all so slow, so pointless, this coming and going. What fun it would be to turn all the way around in a circle. In two circles! To enter Elliot Bay sideways. To chase a tanker, to butt it, and flee with a fleet of tugs.

We riders guide the ferry. The captain steers the wheel, but we steer the captain. Our will excites the engine, our movement within the womb of light; our anticipation of reaching the further shore, meeting friends - these things move the ferry. Overpowered by such feelings, such direction, the ferry's own identity sleeps.

But this night it is we who sleep, thinking of books we have read, of old feelings and vanished landscapes. Even the captain is asleep, standing beside the wheel and gazing out across the bow, fretting over some small thing that occurred days before and planning a complicated revenge. Doughnuts sit wrapped in plastic at the snack bar. It is dark over the water, but clear stars face one another in the deep sky. The blazing lights of the city at this distance are magnificent, awesome, not a thing funny about those lights. . . The island ahead shoulders up dense and proud and strange, carrying the mysterious burden of unknown sounds.

The ferry seizes the moment. This docile cow so taken for granted, so vaguely appreciated, whose throbbing engines pulse through us like a mothering heart - this ferry dives.

On the top level, lazily sighing Shakespeare to invisible owls, I sense the decision. Leaping three steps to the south, I fly from the deck just as the tumbling water wash heavily across, sweeping chairs and telescopes into the depths. All lights are extinguished. A line of whitecaps weaves where the ship has been; an immense misty blue phosphorescence billows beneath the surface for a moment and is gone.

Student Handout Sheet
"Night Run to Winslow" (Cont'd)
Page 3

I hover in the chilly air on my back and begin drifting slowly toward the island, pulled by a great warmth, a great sympathy.

The ferry descends deep and heads into the surging tide. Cars and bodies and old sandwiches are flushed out, spilling silently toward the murky bottom. Moving swiftly north, it passes the islands, exhilarated by its escape. Fish gather in the lounge. The gloom of wide oceans looms ahead far down the deep trench of Juan de Fuca. Cold wild waters of the Pacific rush through the creaking steel caverns.

A pod of whales emerges from the Strait of Georgia. They drift, tasting many mingling waters. The ferry nudges close and the whales wheel about it, murmuring. The silver pollen of river silt hangs motionless in the water around them. Then the lingering ends; in a great graceful tumble the whales turn westward to the sea, and the ferry follows.

Mr. Lawhead's first book of poems, *Nothing Lives Long*, was published by Graywolf Press.

Study questions to answer:

1. Why is the ferry bored?
2. What is one thing it would like to do for fun?
3. Why does the author refer to the ferry as a "docile cow?"
4. Why does the ferry dive?
5. What does the ferry look like just before it disappears from sight?
6. Through what body of water does the ferry go?
7. Which do you like best, the real situation of the poem or one of the imaginings of the story?

●

●

ACTIVITY 5:

POETRY OF THE SEA

● **(3 days)**

ACTIVITY 5: POETRY OF THE SEA (3 days)

CONCEPTS:

1. Marine environment is a rich subject for literature.
2. Poets use certain devices of language to make their observations clear and forceful: simile, metaphor, personification.
3. Poems should be read several times and read aloud to be fully enjoyed.

OBJECTIVES:

1. Students will demonstrate:
 - a. knowledge of poetic devices of simile, metaphor and personification
 - b. ability to read poetry for fullest appreciation
 - c. knowledge of new vocabulary used in the poems
2. Students will have heightened awareness of levels of observation.
3. Students will be familiar with a variety of poems about the sea environment.

TEACHER PREPARATION:

1. Duplicate student handouts - "Suggestions for Reading Poetry" (two pages); "Sandpipers" (one page); Study questions (one page) and other poems.
2. Make overhead transparency - "Leviathan"
3. Read poems and poetic techniques and suggestions

MATERIALS:

1. Student copies of:
 - a. Suggestions for reading poetry
 - b. "Sandpipers"
 - c. "Fish Story"
 - d. "Sea Fever"
 - e. "Neither Out Far Nor In Deep"
 - f. "Yellow and Grave Sea"
 - g. General study questions
2. Overhead transparency of "Leviathan"
3. Dictionaries for student use

PROCEDURES:

1. Hand out "Suggestions for Reading Poetry" and allow time for students to read and do exercises.
2. Lead a discussion about sea gulls or other familiar sea animals
 - a. Poets sometimes try to create pictures in our mind. This works especially well when we are already familiar with the subject of the poem. For example, living around Puget Sound, we are familiar with sea gulls. We have seen them take off, wings spread wide, and we've seen them land. We have heard them squawking and have seen them circling, begging for food.
 - b. Close your eyes and try to picture in your mind, a sea gull. Imagine the sea gull about to land. What does he do with his feet? Does he land with wings spread or closed? What other details can you remember? What does the sea gull sound like? What words describe the noise a sea gull makes? Allow students to share ideas. Encourage the students to use words that would enable a person who doesn't know what a sea gull is, to be able to visualize the bird.

3. (Optional) Locate and share with students a poem, "Gulls Land and Cease to Be." This poem by John Ciardi, may be found in his book, Person to Person. Poet John Ciardi has also seen a sea gull land, and by careful observation has recorded the steps and details of that process.
 - a. Have the students read the poem silently, then aloud. Ask them to draw or diagram the steps in the landing in order as they "see" it in the poem. (Draw a large square on a piece of paper. The top is the sky, bottom is ground. Draw a bird 4 times in different positions with wings open or closed.)
 - b. Compare drawings and put some on the board.
 - c. Discuss how the poem and the poet helps us to visualize a specific event.
4. Lead the discussion of "Sandpipers"
 - a. Poet Howard Nemerov, has observed sandpipers on the beach. He creates a picture in our minds of the "small, dapper birds" as they run back and forth between one wave and the next. These birds remind him of other things and he shares those comparisons with us in his poem, "Sandpipers."
 - b. Vocabulary to know before reading: (List on board for students to define and discuss.)
 1. dapper
 2. perceptions
 3. procrastinating
 4. unison
 5. precision
 6. revealed
 - c. Thought questions before reading: What does a sandpiper look like? What does it do on the beach? How does it move? Can you think of something of which it reminds you? Discuss.
5. Pass out "Sandpiper." Allow time for the students to read it and answer questions. Read poem aloud. Discuss answers.
6. Poets create pictures for us, to share their awareness and insight into something they have experienced. Sometimes they create a picture before we even read the poem.
 - a. Present on an overhead projector the poem "Leviathan" by Nelson Bentley. This poem was written especially for the "Literature and the Sea" activity packet. Discuss how the shape of the poem helps us visualize and share in the poet's insight into whales.
 - b. Help students "see" the techniques the poet has used to help "teach" about what he knows. For example, note the O in blowhole. Also note the references to the flukes or tail are in the tail section. Ask the student if he/she can see other ways the poet is helping us see the whale and what the whale is.
 - c. Vocabulary to know before reading: (list on board for students to define and discuss.)
 1. blowhole
 2. flukes
 3. galley-west
 4. sounding
 5. condensed
 6. leviathan

7. The remainder of this activity is spent looking at a selection of poems in small groups for study, oral reading, and answering "General study questions." (The groups could then share their findings with the class.) The poems are of varying difficulty and should be selected according to students' abilities.

**EXTENDED
ACTIVITIES:**

1. Select poems to illustrate.
2. Go to the beach and observe a sea gull landing or a sandpiper running around. Try to capture the activities on film.
3. Write other "shape" poems like "Leviathan."
4. Have students write a "fish story" from the fish's point of view.

Suggestions for Reading Poetry

1. Use your imagination. The poet, writing primarily to please himself, is not going to tell you his thoughts so fully as, for example, a short story writer might. If you are to appreciate the poem, you must be willing to think, to explore, and to dream.
2. Watch for the deeper meanings. The poet often is not content to put down his thoughts exactly as they come to him. He enriches them with the poet's picturesque language and imaginative constructions: similes, metaphors, and personifications. (See below.) While your part in reading a poem should be primarily to enjoy, you will be rewarded if you look for these carefully planned levels of meaning that add depth. Interpreting the poet's symbols correctly will permit you to enlarge and enrich your understanding.
3. Read the poem several times. As you become familiar with a poem, your understanding of the poet's meaning generally increases. Remember, too, that you will be interpreting the poem through your own background and experiences; your responses may not be precisely what the poet had in mind. It is enough, however, to come close.
4. Read the poem aloud. Don't stop or pause at the end of a line unless it is also the end of a thought or sentence. The original purpose of poetry was to entertain listeners through a vocal presentation. This basic purpose is still unchanged, and the added enjoyment and understanding that come through oral reading make it a vital step in appreciating fine poetry.

Three devices of language that poets often use to make their observations clear and forceful are:

- a. simile - compares one thing with another using like or as.
(She ran as fast as lightning.)
- b. metaphor - also a comparison, but without using like or as.
(He was a tiger on defense.)
- c. personification - giving the qualities of a person to a thing or idea.
(The wind screamed and growled through the night.)

The wind does not "scream", but your imagination accepts the image and you get a more vivid picture as a result.

These terms may sound complicated, but are really simple. In fact, you use them all the time.

Write the word simile, metaphor or personification after each of these sentences:

1. Her face is pale like a mist-filled dawn. (simile)
2. The sun watched the children playing. (personification)
3. Silence is scattered like broken glass. (simile)
4. He is a doll. (metaphor)
5. The fog comes on little cat feet. (personification)

Now you write three phrases or sentences of your own in which you give an example of:
1-simile; 2-metaphor; 3-personification.

NAME _____

DATE _____

PERIOD _____

Suggestions for Reading Poetry

1. Use your imagination. The poet, writing primarily to please himself, is not going to tell you his thoughts so fully as, for example, a short story writer might. If you are to appreciate the poem, you must be willing to think, to explore and to dream.
2. Watch for the deeper meanings. The poet often is not content to put down his thoughts exactly as they come to him. He enriches them with the poet's picturesque language and imaginative constructions: similes, metaphors, and personifications. (See below.) While your part in reading a poem should be primarily to enjoy, you will be rewarded if you look for these carefully planned levels of meaning that add depth. Interpreting the poet's symbols correctly will permit you to enlarge and enrich your understanding.
3. Read the poem several times. As you become familiar with a poem, your understanding of the poet's meaning generally increases. Remember, too, that you will be interpreting the poem through your own background and experiences; your responses may not be precisely what the poet had in mind. It is enough, however, to come close.
4. Read the poem aloud. Don't stop or pause at the end of a line unless it is also the end of a thought or sentence. The original purpose of poetry was to entertain listeners through a vocal presentation. This basic purpose is still unchanged, and the added enjoyment and understanding that come through oral reading make it a vital step in appreciating fine poetry.

Three devices of language that poets often use to make their observations clear and forceful are:

- a. simile - compares one thing with another using like or as.
(She ran as fast as lightning.)
- b. metaphor - also a comparison, but without using like or as.
(He was a tiger on defense.)
- c. personification - giving the qualities of a person to a thing or idea.
(The wind screamed and growled through the night.)

The wind does not "scream", but your imagination accepts the image and you get a more vivid picture as a result.

These terms may sound complicated, but are really simple. In fact, you use them all the time.

Student Handout

Write the word simile, metaphor or personification after each of these sentences:

1. Her face is pale like a mist-filled dawn. _____
2. The sun watched the children playing. _____
3. Silence is scattered like broken glass. _____
4. He is a doll. _____
5. The fog comes on little cat feet. _____

Now you write three phrases or sentences of your own in which you give an example of:
1-simile; 2-metaphor; 3-personification.

NAME _____

DATE _____

PERIOD _____



SAND PIPERS

In the small territory and time
 Between one wave and the next, they run
 Down the beach and back, eating things
 Which seem conveniently for them,
 To surface only when the sand gets wet.
 Small, dapper birds, they make me think
 Of commuters seen, say, in an early movie,
 Where the rough screen wavers, where the light
 Jerks and seems to rain; of clockwork dolls
 Set going on the sidewalk, drawing a crowd
 Beside the newsstand at five o'clock, their legs
 Black toothpicks, their heads nodding at nothing.

But this comedy is based upon exact
 Perceptions, and delicately balanced
 Between starvation and the sea--
 Though sometimes I have seen one slip and fall
 From either the undertow or greed
 And have to get up in the wave's open mouth,
 Still eating. I have never seen
 One caught; if necessary, he spreads his wings,
 With the white stripe, and flutters rather
 than flies

Out to begin eating again at once.
 Now they are over every outer beach,
 Procrastinating steadily southward
 In endlessly local comings and goings.
 Whenever a flock of them takes flight
 And flies with the beautiful unison
 Of banners in the wind, they are
 No longer funny. It is their courage,
 Meaningless as the word is when compared
 With their thoughtless precisions, that strikes
 Me when I watch them hidden and revealed
 Between two waves, lost in the sea's
 Deep color as they distance me--
 From winter already-- while I
 Am a birdist. When suddenly they turn
 In unison, all their bellies shining
 Like mirrors white with flashing signals
 I cannot read. I wish them well.

Howard Nemerov



Teacher Information Sheet
"Sandpipers"

Study questions to answer:

1. Of what is the poet reminded by the sandpipers' running?
(jerky old-time movie or clockwork dolls)
2. To what does he compare their legs?
(black toothpicks)
3. When does he think they are no longer funny?
(when they take flight)
4. Copy the words you think make the poem create a better picture in your mind.
5. With which of the two sea birds are you most familiar, sea gulls or sandpipers?
6. Pick a sea animal you know about. (sea gull, or crab, or salmon, or whatever you would like) List the words or phrases that you would use to describe that animal's activities. For example, what word or phrase would you use to describe the noise a seal makes, or the way a seal catches fish?

Student Handout

NAME _____

DATE _____

PERIOD _____

Study questions to answer:

1. Of what is the poet reminded by the sandpipers' running?

2. To what does he compare their legs?

3. When does he think they are no longer funny?

4. Copy the words you think make the poem create a better picture in your mind.

5. With which of the two sea birds are you most familiar, sea gulls or sandpipers?

6. Pick a sea animal you know about. (sea gull, or crab, or salmon, or whatever you would like) List the words or phrases that you would use to describe that animal's activities. For example, what word or phrase would you use to describe the noise a seal makes, or the way a seal catches fish?

LEVIATHAN

My spout is condensed
breath
seen for miles.

I am the oldest mammal. I weigh 100 tons. My blowhole or nostril's on top. Men hunt me for oil. My tail flukes propel me, with them I knock tail hitting the ocean can sound like a cannonshot. I range from poles to tropics. I bask like an island. I have a big brain. I opened Job's imagination. I whistle like a locomotive. I submerge for half an hour. I hear for miles. My favorite food is squid. Ahab galley -west. I can rise from sounding like a runaway elevator or a skyrocket. I swim like a forward pass, or a huge blubber bullet. I spat him on the beach. I'm the size of 5 elephants, or a house. The seas and oceans are all my roadways.

(0)

NAME _____

DATE _____

PERIOD _____

General study questions for poems:

1. What is the title of the poem?
2. Who is the author?
3. What does the poem do?
 - a. tell a story _____
 - b. present a picture _____
 - c. express an emotion _____
 - d. Teach a lesson _____
4. What is the setting? (time and place)

Is it real or imaginary? _____

5. Is there a theme? (main idea)
6. Is there a problem or conflict? _____

Who or what caused it? _____

7. Does the poetry rhyme? _____
- If so, write the words that rhyme. _____

8. Can you find any "sense" words in the poem? List them. _____
- _____

9. Does the poet view the sea as a friend or enemy?
10. Does the poem talk about anything you have experienced at the sea?

11. Make a list of words in the poem you do not know the meaning of.
- _____
- _____

12. Find any examples of simile, metaphor, personification.

NAME _____
DATE _____
PERIOD _____

FISH STORY

Count this among my heartfelt wishes:
To hear a fish tale told by fishes
And stand among the fish who doubt
The honor of a fellow trout,
And watch the bulging of their eyes
To hear of imitation flies
And worms with rather droopy looks
Stuck through with hateful, horrid hooks,
And fishermen they fled all day from
(As big as this) and got away from.

--Richard Armour

Reprinted by permission of McGraw-Hill Book Co.

Student Handout

NAME _____

DATE _____

PERIOD _____

The eternal lure of the sea is captured in this poem by John Masefield, poet laureate of England from 1930 until his death in 1967. Masefield himself could not resist that lure. He ran away to sea at the age of thirteen. One of the best-loved of all sea poems, "Sea Fever", is from his first collection, Salt Water Ballads, published in 1902. This poem is well known and is included in most anthologies.

SEA FEVER

I must go down to the seas again, to the lonely sea and the sky,
And all I ask is a tall ship and a star to steer her by,
And the wheel's kick and the wind's song and the white sail's shaking,
And a grey mist on the sea's face and a grey dawn breaking.

I must go down to the seas again, for the call of the running tide
Is a wild call and a clear call that may not be denied;
And all I ask is a windy day with the white clouds flying,
And the flung spray and the blown spume, and the sea gulls crying.

I must go down to the seas again to the vagrant gypsy life,
To the gull's way and the whale's way where the wind's like a whetted knife;
And all I ask is a merry yarn from a laughing fellow-rover
And quiet sleep and a sweet dream when the long trick's over.

--John Masefield

*"Sea Fever" from Poems by John Masefield.
Reprinted by permission of MacMillan Publishing Co., Inc.*

NAME _____

DATE _____

PERIOD _____

NEITHER OUT FAR NOR IN DEEP

The people along the sand
All turn and look one way.
They turn their back on the land.
They look at the sea all day.

As long as it takes to pass
A ship keeps raising its hull;
The wetter ground like glass
Reflects a standing gull.

The land may vary more;
But wherever the truth may be--
The water comes ashore,
And the people look at the sea.

They cannot look out far.
They cannot look in deep.
But when was that ever a bar
To any watch they keep?

--Robert Frost

NAME _____

DATE _____

PERIOD _____

YELLOW AND THE GRAVE SEA

Two shore birds becalmed
under heavy grey weather
pregnant summer sky
sulks and stalks
the wide hard sand slopes

all night beside
the silent sea
we have heard the sound
under a moon full & hidden
the earth's sail hangs
over our heads
and the moon's open wound
sings to the ocean

Monsters, grey whales
barnacle encrusted
elephant hide
opens a trembling pathway
the sea sound flowing
like blood from the loud wound

The great bulk of whale
is the moon's tear
(lick of salt)
is the moon turning
and rolling
under a mile of ocean
turning and burning
in the fiery throat
that is cold and deep
and blue and deeper a blue
than sky
is the ocean that sings in the heart
of the fire
is the fire that sings in the heart
of the whale

--Allan Safarik

●

●

ACTIVITY 6:

THE SEA AS A CONTRADICTION

● **(2 days)**

ACTIVITY 6: THE SEA AS A CONTRADICTION (2 days)

- CONCEPTS:** There are different and often contradictory perspectives from which to view the sea.
- OBJECTIVES:** Students become familiar with two well-known and very different prose selections about the sea.
Students experience descriptive writing.
- TEACHER PREPARATION:** Read both excerpts Gift From the Sea and "Poulps" before doing activity.
- MATERIALS:** Teacher information sheets - excerpts from Gift From the Sea (2 pages) and "Poulps" (5 pages).
- PROCEDURES:**
1. Lead discussion
 - a. We mentioned at the beginning that the sea evokes feelings of contradiction. It can be familiar and friendly or mysterious and terrifying. Writers have written of its beauty and of its horror. Today we'll look at examples of both: The peacefulness of Gift From the Sea and the terror of a sea monster in 20,000 Leagues Under the Sea.
 - b. One writer, Anne Morrow Lindbergh, went alone to the beach for its quiet and a chance to think and experience the calming rhythms of the seashore. She shares her thoughts in a book entitled, Gift From the Sea.
Listen for answers to these questions:
 - c. What feeling does the writer get at the beach? (relaxed)
 - d. What quality does she say a person must have to receive a "gift from the sea"? (patience)
 - e. To what object does she compare her life? (shell)
 - f. How does she contrast beach life to city life? (calm, relaxed, and quiet)
 2. Students list 5 gentle, pleasant things they have done at sea.
 3. Teacher, read excerpt (page 15-22). Ask the students to try to share her peaceful feelings as they listen. May close eyes, relax in seats, put heads down.
 4. Then have them quickly write a description of a sea monster.
 5. Lead discussion: "The Poulps"
Many writers have referred to the sea as two-faced, wearing the same image of a good and generous friend and a cold and unyielding enemy. For dramatic purposes fiction writers like Jules Verne exaggerated facts about the sea and its creatures. The sea becomes a threat to life. Teacher, read "The Poulps" by Jules Verne, an excerpt from his novel about confronting the giant squid.
Discuss the excerpt:
 - a. Did the monster seem real to you as you heard it?
 - b. Did the action seem real?
 - c. Have you read of any other sea monsters?
 - d. Students read their monster descriptions.

**EXTENDED
ACTIVITIES:**

Students illustrate Verne's monster from the vivid description in the excerpt.

BIBLIOGRAPHY:

Gift From the Sea by Anne Morrow Lindbergh

Twenty Thousand Leagues Under the Sea by Jules Verne

The beach is not the place to work; to read, write or think. I should have remembered that from other years. Too warm, too damp, too soft for any real mental discipline or sharp slights of spirit. One never learns. Hopefully, one carries down the faded straw bag, lumpy with books, clean paper. Long over-due unanswered letters, freshly sharpened pencils, lists, and good intentions. The books remain unread, the pencils break their points, and the pads rest smooth and unblemished as the cloudless sky. No reading, no writing, no thoughts even--at least, not at first.

At first, the tired body takes over completely. As on ship-board, one descends into a deck-chair apathy. One is forced against one's mind, against rhythms of the sea-shore. Rollers on the beach, wind in the pines, the slow flapping of herons across sand dunes, drown out the hectic rhythms of city and suburb, time tables and schedules. One falls under their spell, relaxes, stretches out prone. One becomes, in fact, like the element on which one lies, flattened by the sea; bare, open, empty as the beach, erased by today's tides of all yesterday's scribblings.

And then, some morning in the second week, the mind wakes, comes to life again. Not in a city-sense, no--but beach-wise. It begins to drift, to play, to turn over in gentle careless rolls like those lazy waves on the beach. One never knows what chance treasures these easy unconscious rollers may toss up, on the smooth white sand of the conscious mind; what perfectly rounded stone, what rare shell from the ocean floor. Perhaps a channelled whelk, a moon shell, or even an argonaut.

But it must not be sought for or--heaven forbid! dug for. No, no dredging of the seabottom here. That would defeat one's purpose. The sea does not reward those who are too anxious, too greedy, or too impatient. To dig for treasures shows not only impatience and greed, but lack of faith. Patience, patience, patience, is what the sea teaches. Patience and faith. One should lie empty, open, noiseless as a beach--waiting for a gift from the sea.

From Gift from the Sea by Anne Morrow Lindbergh. Copyright 1955 by Anne Morrow Lindbergh. Reprinted by permission of Pantheon Books, a division of Random House, Inc.

CHANNELLED WHELK

The shell in my hand is deserted. It once housed a whelk, a snail-like creature, and then temporarily, after the death of the first occupant, a little hermit crab, who has run away, leaving his tracks behind him like a delicate vine on the sand. He ran away, and left me his shell. It was once a protection to him. I turn the shell in my hand, gazing into the wide open door from which he made his exit. Had it become an encumbrance? Why did he run away? Did he hope to find a better home, a better mode of living? I too have run away, I realize, I have shed the shell of my life, for these few weeks of vacation.

But his shell--it is simple; it is bare, it is beautiful. Small, only the size of my thumb, its architecture is perfect, down to the finest detail. Its shape, swelling like a pear in the center, winds in a gentle spiral to the pointed apex. Its color, dull gold, is whitened by a wash of salt from the sea. Each whirl, each faint knob, each criss-cross vein in its egg-shell texture, is as clearly defined as on the day of creation. My eye follows with delight the outer circumference of that diminutive winding staircase up which this tenant used to travel.

Teacher Information Sheet

From Twenty Thousand Leagues Under the Sea
by Jules Verne

THE POULPS

The mystery of the sea was captured in one of the earliest and most popular of all science-fiction tales, Twenty Thousand Leagues Under the Sea, published in 1870. While working on the book, Jules Verne wrote to his father, "Whatever one man is capable of imagining, other men will prove themselves capable of realizing." Blending fact with fantasy and forecasting with remarkable accuracy the technological developments of a future time, Verne relates the voyage of the Nautilus, an underwater vessel that is at once a scientific laboratory for studying the infinite variety of ocean life and a refuge from the rest of mankind for its captain, Nemo. For Nemo, "The sea is everything. Its breath is pure and healthy. Here man is never lonely, for on all sides he feels life astir. The sea does not belong to despots. Upon its surface men can still make unjust laws, fight, tear one another to pieces, wage wars of terrestrial horror. But at thirty feet below their reign ceases, their influence is quenched, and their power disappears . . . There alone . . . I am free!" Walking the ocean floor in diving suits or cruising through the ocean's depths in their windowed submarine, the crew encounters many marvelous creatures, including those described below in one of the classics of all "monster literature."

"Well, I said, "these are proper caverns for poulps, and I should not be astonished to see some of these monsters."

"What!" said Conseil; "cuttlefish, real cuttlefish, of the cephalopod class?"

"No," I said; "poulps of huge dimensions."

"I will never believe that such animals exist," said Ned.

"Well," said Conseil, with the most serious air in the world, "I remember perfectly to have seen a large vessel drawn under the waves by a cephalopod's arm."

"You saw that?" said the Canadian.

"Yes, Ned."

"With your own eyes?"

"With my own eyes."

"Where, pray, might that be?"

"At St. Malo," answered Conseil.

"In the port?" said Ned, ironically.

"No, in a church," replied Conseil.

"In a church?" cried the Canadian.

"Yes, friend Ned. In a picture representing the poulp in question."

"Good!" said Ned Land, bursting out laughing.

"He is quite right," I said. "I have heard of this picture; but the subject represented is taken from a legend, and you know what to think of legends in the matter of natural history. Besides, when it is a question of monsters, the imagination is apt to run wild. Not only is it supposed that these poulps can draw down vessels, but a certain Olaus Magnus speaks of a cephalopod a mile long, that is more like an island than an animal. It is also said that the Bishop of Nidros was building an

altar on an immense rock. Mass finished, the rock began to walk, and returned to the sea. The rock was a poulp. Another bishop, Pontoppidan, speaks also of a poulp on which a regiment of cavalry could maneuver. Lastly, the ancient naturalists speak of monsters whose mouths were like gulfs, and which were too large to pass through the Straits of Gibraltar."

"But how much is true of these stories?" asked Conseil.

"Nothing, my friends; at least of that which passes the limit of truth to get to fable or legend. Nevertheless, there must be some ground for the imagination of the story-tellers. One cannot deny that poulps and cuttlefish exist of a large species, inferior, however, to the cetaceans. Aristotle had stated the dimensions of a cuttlefish as five cubits, or nine feet, two inches. Our fishermen frequently see some that are more than four feet long. Some skeletons of poulps are preserved in the museums of Trieste and Montpellier, that measure two yards in length. Besides, according to the calculations of some naturalists, one of these animals, only six feet long, would have tentacles twenty-seven feet long. That would suffice to make a formidable monster."

"Do they fish for them in these days?" asked Ned.

"If they do not fish for them sailors see them at least. One of my friends, Captain Paul Bos of Havre, has often affirmed that he met one of these monsters, of colossal dimensions, in the Indian seas. But the most astonishing fact, and which does not permit of the denial of the existence of these gigantic animals, happened some years ago, in 1861."

"What is the fact?" asked Ned Land.

"This is it. In 1861, to the northeast of Tenerife, very nearly in the same latitude we are in now, the crew of the dispatch-boat Alector went near to the animal, and attacked it with harpoons and guns, without much success, for balls and harpoons glided over the soft flesh. After several fruitless attempts, the crew tried to pass a slip-knot around the body of the mollusk. The noose slipped as far as the caudal fins, and there stopped. They tried then to haul it on board, but its weight was so considerable that the tightness of the cord separated the tail from the body, and, deprived of this ornament, he disappeared under the water."

"Indeed! Is that a fact?"

"An indisputable fact, my good Ned. They proposed to name this poulp 'Bouguer's cuttlefish.'"

"What length was it?" asked the Canadian.

"Did it not measure about six yards?" said Conseil, who, posted at the window, was examining again the irregular windings of the cliff.

"Precisely," I replied.

"Its head," rejoined Conseil, "was it not crowned with eight tentacles, that beat the water like a nest of serpents?"

"Precisely."

"Had not its eyes, placed at the back of its head, considerable development?"

"Yes, Conseil."

"And was not its mouth like a parrot's beak?"

"Exactly, Conseil."

"Very well! No offence to master," he replied, quietly; "if this is not Ouguer's cuttlefish, it is, at least, one of its brothers."

I looked at Conseil. Ned Land hurried to the window.

"What a horrible beast!" he cried.

I looked in my turn, and could not repress a gesture of disgust. Before my eyes was a horrible monster, worthy to figure in the legends of the marvelous. It was an immense cuttlefish, being eight yards long. It swam crossways in the direction of the Nautilus with great speed, watching us with its enormous staring green eyes. Its eight arms, or rather feet, fixed to its head, that have given the name of cephalopod to these animals, were twice as long as its body, and were twisted like the turkeys hair. One could see the 250 air-holes on the inner side of the tentacles. The monster's mouth, a horned beak like a parrot's opened and shut vertically. Its tongue, a horned substance, furnished with several rows of pointed teeth, came out quivering from this veritable pair of shears.

What a freak of nature, a bird's beak on a mollusk! Its spindle-like body formed a fleshy mass that might weigh 4,000 to 5,000 pounds; the varying color changing with great rapidity, according to the irritation of the animal, passed successively from livid gray to reddish brown. What irritated this mollusk? No doubt the presence of the Nautilus, more formidable than itself, and on which its suckers or its jaws had no hold. Yet, what monsters these poulps are! What vitality the Creator has given them! What vigor in their movements! And they possess three hearts! Chance had brought us in the presence of this cuttlefish, and I did not wish to lose the opportunity of carefully studying this specimen of cephalopods. I overcame the horror that inspired me; and, taking a pencil, began to draw it.

"Perhaps this is the same which the Alecto saw," said Conseil.

"No," replied the Canadian; "for this is whole, and the other had lost its tail."

"That is no reason," I replied. "The arms and tails of these animals are reformed by reintegration; and, in seven year, the tail of Bouguer's cuttlefish has no doubt had time to grow."

By this time other poulps appeared at the port light. I counted seven. They formed a procession after the Nautilus, and I heard their beaks gnashing against the iron hull. I continued my work. These monsters kept in the water with such precision, that they seemed immovable. Suddenly the Nautilus stopped. A shock made it tremble in every plate.

"Have we struck anything?" I asked.

"In any case," replied the Canadian, "we shall be free, for we are floating."

The Nautilus was floating, no doubt, but it did not move. A minute passed. Captain Nemo, followed by his lieutenant, entered the drawing room. I had not seen him for some time. He seemed dull. Without noticing or speaking to us, he went to the panel, looked at the poulps, and said something to his lieutenant. The latter went out. Soon the panels were shut. The ceiling was lighted. I went toward the Captain.

"A curious collection of poulps?" I said.

"Yes, indeed, Mr. Naturalist," he replied; "and we are going to fight them, man to beast."

I looked at him. I thought I had not heard right.

"Man to beast?" I repeated.

"Yes, Sir. The screw is stopped. I think that the horny jaws of one of the cuttlefish are entangled in the blades. That is what prevents our moving."

"What are you going to do?"

"Rise to the surface, and slaughter this vermin."

"A difficult enterprise."

"Yes, indeed. The electric bullets are powerless against the soft flesh, where they do not find resistance enough to go off. But we shall attack them with the hatchet."

"And the harpoon, Sir," said the Canadian, "if you do not refuse my help."

"I will accept it, Master Land."

"We will follow you," I said, and following Captain Nemo, we went towards the central staircase.

There, about ten men with boarding hatchets were ready for the attack. Conseil and I took two hatchets; Ned Land seized a harpoon. The Nautilus had then risen to the surface. One of the sailors, posted on the top ladder-step, unscrewed the bolts of the panels. But hardly were the screws loosed, when the panel rose with great violence, evidently drawn by the suckers of a poulp's arm. Immediately one of these arms slid like a serpent down the opening, and twenty others were above. With one blow of the axe, Captain Nemo cut this formidable tentacle, that slid wriggling down the ladder. Just as we were pressing one on the other to reach the platform, two other arms, lashing the air, came down on the seaman placed before Captain Nemo, and lifted him up with irresistible power. Captain Nemo uttered a cry, and rushed out. We hurried after him.

What a scene! The unhappy man, seized by the tentacle, and fixed to the suckers, was balanced in the air at the caprice of this enormous trunk. He rattled in his throat, he was stifled, he cried, "Help! Help!" These words, spoken in French, startled me! I had a fellow countryman on board, perhaps several! That heartrending cry! I shall hear it all my life. The unfortunate man was lost. Who could rescue him from that powerful pressure? However, Captain Nemo had rushed to the poulp, and with one blow of the axe had cut through one arm. His lieutenant struggled furiously against other monsters that crept on the flanks of the Nautilus. The crew fought with their axes. The Canadian, Conseil, and I buried our weapons in the fleshy masses; a strong smell of musk penetrated the atmosphere. It was horrible!

For one instant, I thought the unhappy man, entangled with the poulp, would be torn from its powerful suction. Seven of the eight arms had been cut off. One only wriggled in the air, brandishing the victim like a feather. But just as Captain Nemo and his lieutenant threw themselves on it, the animal ejected a stream of black liquid. We were blinded by it. When the cloud dispersed, the cuttlefish had disappeared, and my unfortunate countryman with it. Ten or twelve poulps now invaded the platform and sides of the Nautilus. We rolled pell-mell into the midst of this nest of serpents, that wriggled on the platform in the waves of blood and ink. It seemed as though these slimy tentacles sprang up like the hydra's heads. Ned Land's harpoon, at each stroke, was plunged into the staring eyes of the cuttlefish. But my bold companion was suddenly overturned by the tentacles of a monster he had not been able to avoid.

Ah! How my heart beat with emotion and horror! The formidable beak of a cuttlefish was open over Ned Land. The unhappy man would be cut in two. I rushed to his succor. But Captain Nemo was before me; his axe disappeared between the two enormous jaws, and miraculously saved the Canadian, rising, plunged his harpoon deep in to the triple heart of the poulp.

"I owed myself this revenge!" said the Captain to the Canadian.

Ned bowed without replying. The combat had lasted a quarter of an hour. The monsters, vanquished and mutilated, left us at last, and disappeared under the waves. Captain Nemo, covered with blood, nearly exhausted, gazed upon the sea that had swallowed up one of his companions, and great tears gathered in his eyes.

●

●

LITERATURE AND THE SEA

VOCABULARY

●

BIBLIOGRAPHY

LITERATURE AND THE SEA

VOCABULARY:

1. Pod of whales - a number of animals (whales, seals) clustered together
2. Ferry run - course traveled with regularity, a trip
3. Sea anemone - a sea creature of bright and varied colors with a cluster of tentacles resembling a flower
4. Crevice - narrow opening resulting from a crack
5. Jade - green gem
6. Descend - to pass from a higher to a lower place
7. Emerge - to rise from or come into view
8. Billows - a great wave or surge of water
9. Silt - loose sedimentary material
10. Clamflats - flat area of beach in which to dig clams
11. Phosphorescence - an enduring luminescence (light)
12. Marine environment - pertaining to the water
13. Anticipation - the act of looking forward
14. Docile - obedient
15. Vaguely - not clearly expressed
16. Exhilarated - refreshed, enlivened
17. Simile - comparison of one thing with another using like or as
18. Metaphor - a comparison not using like or as
19. Personification - giving the qualities of a person to a thing or idea
20. Dapper - neat, trim
21. Perceptions - observations
22. Procrastinating - to continually put off
23. Unison - done at the same time
24. Precision - exactness
25. Revealed - to make known, uncover

Student Handout

NAME _____

DATE _____

PERIOD _____

VOCABULARY LIST

1. Pod of whales
2. Ferry run
3. Sea anemone
4. Crevice
5. Jade
6. Descend
7. Emerge
8. Billows
9. Silt
10. Clamflats
11. Phosphorescence
12. Marine environment
13. Anticipation
14. Docile
15. Vaguely
16. Exhilarated
17. Simile
18. Metaphor
19. Personification
20. Dapper
21. Perceptions
22. Procrastinating
23. Unison
24. Precision
25. Revealed

Quiz:

1. Are high and low tides predictable? *(yes)*
2. What are 2 factors affecting tides?
(Moon, sun, gravity, topography, geology, location, winds and weather)
3. What percentage of the earth's surface is covered with water? *(70.8%)*
4. What is the average depth of the world's oceans? *(2-1/3 miles)*
5. How many of the 50 states have no access to the seas either directly or via the nation's waterways? *(10)*
6. If Mt. Everest were sunk into the deepest part of the ocean, would it be covered by water? *(yes)*
7. What percentage of Americans live within an hour's drive of the sea or Great Lake shores? *(50%)*
8. What does "pod" mean in the phrase a "pod" of whales? *(group)*
9. What does the word "run" mean in the phrase "ferry run?" *(trip, voyage)*
10. How many ferries cross the Puget Sound per day? *(note current ferry schedules)*
To what one thing do these ferry names refer? *(Indian tribes, cities/towns)*
11. Does a seagull land with his wings spread or closed? *(spread)*
12. What is a sandpiper? *(bird on the beach)*
How does it move? *(jerkily)*
Can you think of something of which it reminds you? *(wind-up toy)*
13. Is the sea a familiar friendly place or a mysterious, terrifying place?
Explain your answer. *(Both - varying perspectives)*
14. What is the biggest creature that lives in the sea? *(blue whale)*
15. Is there such a thing as a "sea monster?"

Define the following:

Vocabulary

jade
descend
emerge
billows
silt
clamflats
phosphorescence

Spelling

Sea anemone
crevice
seagulls
peninsula
marine
Puget Sound
Pacific

Student Handout

NAME _____

DATE _____

PERIOD _____

Quiz:

1. Are high and low tides predictable?
2. What are 2 factors affecting tides?

3. What percentage of the earth's surface is covered with water?
4. What is the average depth of the world's oceans?
5. How many of the 50 states have no access to the seas either directly or via the nation's waterways?
6. If Mt. Everest were sunk into the deepest part of the ocean, would it be covered by water?
7. What percentage of Americans live within an hour's drive of the sea or Great Lake shores?
8. What does "pod" mean in the phrase a "pod" of whales?
9. What does the word "run" mean in the phrase "ferry run"?
10. How many ferries cross Puget Sound/day?
To what one thing do these ferry names refer: Klickitat, Walla Walla, Spokane?
11. Does a seagull land with his wings spread or closed?
12. What is a sandpiper?
How does it move?
Can you think of something of which it reminds you?
13. Is the sea a familiar friendly place or a mysterious, terrifying place?
Explain your answer.
14. What is the biggest creature that lives in the sea?
15. Is there such a thing as a "sea monster"?

Define the following:

Vocabulary

jade
descend
emerge
billows
silt
clamflats
phosphorescence

Spelling

Sea anemone
crevice
seagulls
peninsula
marine
Puget Sound
Pacific

LITERATURE AND THE SEA

BIBLIOGRAPHY:

Books

- Carson, Rachel. The Sea Around Us. New American Library, Inc., New York, New York, 1961.
- Ciardi, John. The Man Who Sang the Sillies. J.P. Lippincott Co. Philadelphia and New York, 1961.
- Clymer, Theodore, et. al., To Turn a Stone. Ginn & Co., Boston, Massachusetts, 1970.
- Dunning, Steve, et. al. Reflections on a Gift of Watermelon Pickle and Other Modern Verse. Scott, Foresman & Co. New York, New York, 1966.
- Frost, Robert. Selected Poems of Robert Frost. Hold, Rinehart and Winston, New York, New York, 1963.
- Hawkins, Helen S. Oceans: Our Frontier. Publisher's Inc., University of California, San Diego, CA, 1976.
- Kohn, Bernice. The Beachcomber's Book. Viking Press, New York, New York, 1970.
- Lieb, Michael and Sullivan, Bill. Shadow of Goosewing. Potlatch Printing - Northwest Inc., Seattle, WA., 1977.
- Lindbergh, Ann Morrow. Gift From the Sea. Random House, Inc., New York, New York, 1955.
- Molloy, Paul (ed.). Beach Glass and Other Poems. Four Winds Press (Division of Scholastic Magazines), New York, New York, 1971.
- Nemerov, Howard. Collected Poems of Howard Nemerov. Chicago Press, 1977.
- Verne, Jules. Twenty Thousand Leagues Under the Sea.

Short Stories

- Wilson, Robley Jr. "A Stay at the Ocean", Eco-Fiction, Edited by John Stadler, Washington Square Press, New York, 1971.

Periodicals

- Lawhead, Terry. "Night Run to Winslow", Pacific-Search, September 1977.

Curriculum

- Sea Grant. Harold L. Goodwin. Newark, Delaware, University of Delaware.

- Introduction to Marine Education, 1977.

Films

Seashore, 01483 Col. A portrait of the marvels of the seashore with a low key message to preserve these wonders for future generations. Pyra 72; 8 minutes; IS

Sense of Wonder, 70652-70653 Col. Based on Rachel Carson's best selling books "The Sense of Wonder" and "The Edge of the Sea". This film gives visual expression to what the author felt about the beauty and meaning of nature. MGHTOP 70; 53 minutes; JS.

Sea Sorcery, Underwater photography with music, but no narration. Seattle Library.

Sperm Whale, Jacques Cousteau; 22 minutes; color; Seattle Library.

ORCA FEEDBACK REPORT
MARINE EDUCATION PROJECT

We need your ideas, comments and suggestions about this activity packet to refine existing materials and plan for future program development. Please fill out this survey, remove it from the packet and mail it to us. It has been pre-addressed for your convenience. In anticipation of your response and contribution, thank you.

Teachers Name _____ School _____
School District _____ Grade Level _____
No. of Students Involved _____ Type of Class _____
(i.e., science, social studies, math, etc.)

1. Circle the activity packet you are evaluating.

- | | | |
|-------------------------------------|------------------------|------------------------|
| Beaches | Profiles and Transects | Literature and the Sea |
| Early Fishing People of Puget Sound | Tides | |
| Energy from the Sea | Tools of Oceanography | |

2. Please list (and comment about) the activities you have used from the activity packet. _____

3. Keeping in mind your course objectives:

- a. How well did this material relate? _____
- b. How appropriate for your students were the concepts, principles and vocabulary of this activity packet? _____

- c. How realistic were the activities and skills for your students? _____

Are the teacher's materials and instructions adequate and complete? _____

5. How could this activity packet be improved? _____

6. All things considered, which of the following best describes your overall feeling about the ORCA packet you used?
very useful _____ useless _____
1 2 3 4 5

7. Do you plan to use these materials again? _____

8. Do you plan to use any of the other activity packets? _____

9. Have you introduced other teachers to the activity packets? _____
If so, who else may be presently using the materials? _____

10. Would you use Marine Education activities as a vehicle to teach skills in other areas? (Please check all those that apply.)
_____ SCIENCE _____ ENGLISH _____ ART _____ VOCATIONAL EDUCATION
_____ SOCIAL STUDIES _____ MATH _____ HUMANITIES _____ HOME ECONOMICS
_____ OTHER (Please specify)

11. Would you be interested in?

a. Using the Marine Education Resource Center and the Pacific Science Center? YES NO

b. Attending a marine education inservice workshop? YES NO

12. May we contact you for further information? _____

Space for additional comments on back.

Additional Comments:

(fold here)

(fold here)

STAMP

Marine Education Project
Pacific Science Center
200 2nd Ave. N.
Seattle, WA 98109