

DOCUMENT RESUME

ED 289 672

SE 048 757

AUTHOR Moore, Cecelia; Peterson, Peggy
 TITLE American Poetry and the Sea. Ocean Related Curriculum Activities.
 INSTITUTION Pacific Science Center, Seattle, Wash.; Washington Univ., Seattle. Washington Sea Grant Program.
 SPONS AGENCY National Oceanic and Atmospheric Administration (DOC), Rockville, Md. National Sea Grant Program.; Washington Office of the State Superintendent of Public Instruction, Olympia.
 PUB DATE 80
 NOTE 104p.; Drawings may not reproduce well.
 AVAILABLE FROM Pacific Science Center Giftshop, 200 2nd Ave. North, Seattle, WA 98109 (\$6.00).
 PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)
 EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
 DESCRIPTORS Environmental Education; *Interdisciplinary Approach; *Language Arts; Marine Biology; *Marine Education; Oceanography; *Poetry; Poets; Science Activities; *Science and Society; Science Curriculum; Science Education; Science Instruction; Secondary Education; *Secondary School Science; Water Resources
 IDENTIFIERS *Project ORCA; Washington

ABSTRACT

The ocean affects all of our lives. Therefore, awareness of and information about the interconnections between humans and oceans are prerequisites to making sound decisions for the future. Project ORCA (Ocean Related Curriculum Activities) has developed interdisciplinary curriculum materials designed to meet the needs of students and teachers living in Washington State. Each activity packet provides the teacher with a set of lessons dealing with a particular topic related to the oceans. Included are student worksheets, lesson plans, and a bibliography. This activity packet designed for grades 10-12 presents a variety of poems about the sea, written by American poets. One section deals exclusively with poems by Pacific Northwest poets. Students are exposed to many different poetic responses to the sea and are expected to read, understand and discuss each selection. A major purpose of this unit is to make students aware of our marine environment. Other purposes are to help students become familiar with the various techniques poets use to create their poetry and to introduce students to poetry as an art form to be experienced and enjoyed. (TW)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

AMERICAN POETRY AND THE SEA

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

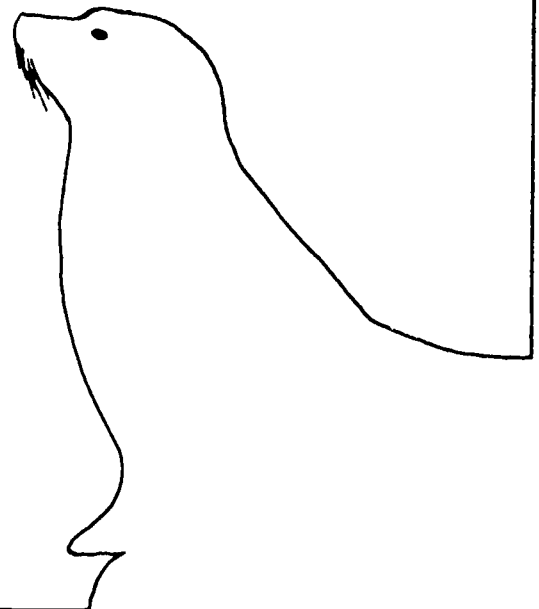
Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Andrea Marrett

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



ORCA



OCEAN RELATED CURRICULUM ACTIVITIES

PACIFIC SCIENCE CENTER / SEA GRANT
MARINE EDUCATION PROJECT

Andrea Marrett, Manager
Cecella Moore, Peggy Peterson, Writers
Susan Lundstedt, Illustrator

ED289672

SE 048 757

ORCA PUBLICATIONS

ELEMENTARY

High Tide, Low Tide (4th Grade)
Life Cycle of the Salmon (3rd - 4th Grade)
Waterbirds (4th - 5th Grade)
Whales (4th - 6th Grade)

JUNIOR HIGH

Beaches
Beach Profiles and Transects
Early Fishing Peoples of Puget Sound
Energy from the Sea
Literature and the Sea
Tides
Tools of Oceanography

SENIOR HIGH

American Poetry and the Sea
Marine Biology Activities
Marine Biology Field Trip Sites
Marshes, Estuaries and Wetlands
Squalls on Nisqually: A Simulation Game

© Copyright by Pacific Science Center, 1980.

This activity packet was produced at the Pacific Science Center in cooperation with Washington Sea Grant and Office of the Superintendent of Public Instruction. Permission to reprint these materials is subject to approval by the Pacific Science Center. For permission or further information contact the Pacific Science Center, 200 Second Avenue North, Seattle, WA (206) 625-9333.

PROJECT 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 lives; 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 effects 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 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 senior high series of ORCA (Ocean Related Curriculum Activities) is the product of a cooperative effort between many people and organizations. The primary responsibility for the program belongs to the Pacific Science Center, where the materials were developed. Financial assistance and technical support were provided by the National Oceanic and Atmospheric Administration (N.O.A.A.) Sea Grant, held by the University of Washington.

TRIAL TEACHERS

Trial teachers help us by testing the materials with students in the classroom and by reading, evaluating and offering suggestions for more effective curriculum. The teachers who gave their time, effort and advice were:

Bill Bond	John Pauls
Bill Brockman	Shirley Pauls
Dave Brubaker	Kathy Sider
Cecelia Moore	

CONSULTANTS

A variety of people were asked for information, advice and help during the development of the curriculum. Their support and interest were greatly appreciated.

The many people and organizations who provided technical assistance and expertise were:

King County Planning Commission
League of Women Voters
Seattle Aquarium
Weyerhaeuser Industries

Lexie Borrie-Bakewell, U.S. Geological Survey
Dick Butler, King County, Division of Resource Planning
Bill Eckel, King County, Division of Resource Planning
Ellie Hencke, U.S. Fish and Wildlife Service, Nisqually Delta
Ron Hirschi, Washington State Department of Game
Ernie McDonald, U.S. Forest Service
Jed Marshall, Seattle Audubon Society
Sam Mitchell, Federal Way School District
Alvie Moritz, Edmonds School District
Liz Sears, Edmonds School District

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

Lynda Blakely, Pacific Science Center
Ralph Carlson, Evaluator
Claire Dyckman, Environmental Education Program, Northwest Section,
Washington State
Lolly Greathouse-Smith, Environmental Education Programs, Northwest Section,
Washington State

Melinda Mueller, Poet-Botanist, The Northwest School of the Arts,
Humanities and Environment
Shirley Pauls, Edmonds School District.

A sincere thank you to two consultants who gave extensive time, support and special expertise:

Alyn Duxbury, Ph.D., Assistant Director of New Programs, Division of Marine Resources, University of Washington
David Kennedy, Supervisor of Science, Environmental Education and Marine Education, Office of the Superintendent of Public Instruction

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:

Levon Balzer, Ph.D., Dean of Instruction, Seattle Pacific University
Helen Frizzell, Teacher, Northshore School District
Charles Hardy, Coordinator, Math and Science, Highline School District
David Kennedy, Supervisor of Science, Environmental and Marine Education, Office of the 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, Seattle School District
William Stevenson, Superintendent, Shoreline School District
Mark Terry, Associate Director, Environment, The Northwest School of the Arts, Humanities, and the Environment, Seattle

STAFF

Finally, the production of the senior high series could only occur with the immense help of staff members who were instrumental in creating, developing and supporting this project.

As one of the curriculum writers for the senior high series, I can truly appreciate the efforts of the other writers:

Cecelia Moore, John Pauls and Peggy Peterson

The efforts of all people responsible for graphics, design and paste-up are greatly appreciated:

Laurie Dundie, paste-up
Susan Lundstedt, graphics
Valene Starrett, cover design

The necessary job of reviewing, editing and typing take time and patience. Those who handled that task were:

Lynda Blakely, editing
Maxine Fischer, typing
Peggy Peterson, editing

Most especially I want to thank the Director of Education and Project Investigator, Bonnie DeTurck; Laurie Dundie, the Marine Education Assistant; John Kenning and Peggy Peterson for their continued support and efforts for the marine education project.

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

AMERICAN POETRY AND THE SEA

ABSTRACT:

This activity packet presents a variety of poems about the sea, written by American poets. One section deals exclusively with poems by Pacific Northwest poets. Students are exposed to many different poetic responses to the sea and are expected to read, understand and discuss each selection.

A major purpose of this unit is to make students aware of our marine environment. Other purposes are to help students become familiar with the various techniques poets use to create their poetry and to introduce students to poetry as an art form to be experienced and enjoyed.

SUBJECTS:

Language Arts

GRADE LEVELS:

10 - 12

WRITTEN BY:

Cecelia Moore
Peggy Peterson

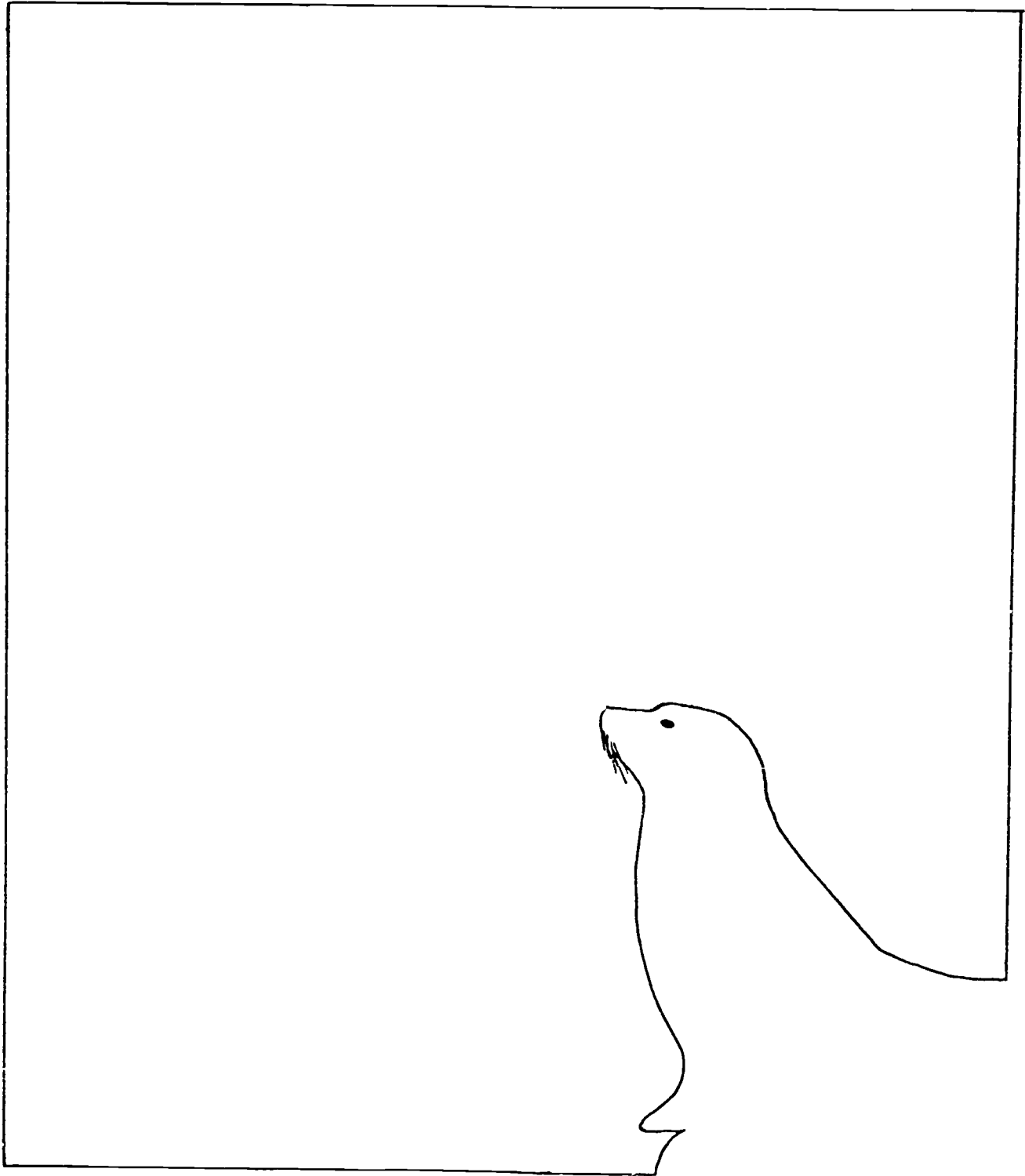
TABLE OF CONTENTS AND OVERVIEW

	PAGE
ACTIVITY 1: THE WORLD OF WATER (1 DAY)	6
<p>This activity introduces the concept of the earth as a water planet. Information on the ocean floor, tides, marine life, beach zonation and the many resources and uses of the ocean is provided to spark student curiosity about the world of water and to enrich their experience of the sea poems. The concept of trade-off is also discussed as it pertains to the exploitation of the ocean's resources.</p>	
ACTIVITY 2: READING POETRY (1 DAY)	18
<p>The student is introduced to techniques used in poetry, including simile, metaphor, personification, meter, rhyme, assonance and alliteration. Students learn how to scan a line of poem to discern the meter. The students begin reading poetry aloud, stopping at the end of a thought as indicated by the punctuation, and not necessarily at the end of a line. The idea of poetry as something to be enjoyed and containing ambiguities which allow for varied interpretation is also discussed.</p>	
ACTIVITY 3: MOODS AND MAJESTY OF THE SEA (2 DAYS)	30
<p>The many moods of the sea are discussed as portrayed through poems, film, music and optional slides of paintings. How poets create a mood is examined through comparing different poems on the same subject. The poetic form of free verse and some techniques used in this form are also explored, including half-rhyme, onomatopoeia and repetition.</p>	
ACTIVITY 4: THE WORLD BELOW THE BRINE (2 DAYS)	44
<p>This activity combines films and poetry to take a look at the "world below the brine." The students will become familiar with the incredible variety of species found in the ocean. The endangerment of these species is also discussed, using the sperm whale as an example. The plight of whales provides discussion on both poetry and conservation through the response of 2 poets to this issue.</p>	
ACTIVITY 5: PACIFIC NORTHWEST POETS AND THE SEA (2 DAYS)	62
<p>The waters of the Pacific Northwest have inspired local poets to express their response to the sea and some of their poems are explored. Students will use the skills gained in the previous activities to glean the richness from and to lead discussions on these poems.</p>	
EVALUATION, VOCABULARY AND BIBLIOGRAPHY	86

OBJECTIVES:

After completing this activity packet students should:

1. recognize the extent and importance of our marine environment and realize that the earth is a water planet.
2. recognize the sea as a subject of the creative process in the humanities.
3. realize that the exploitation of marine environments can cause the depletion of marine species and natural resources.
4. read poetry aloud properly according to the punctuation and tone of the poem.
5. understand and be able to identify some techniques poets use to create their poetry:
 - a. figurative language--simile, metaphor, personification.
 - b. rhyme, alliteration, assonance, onomatopoeia, repetition.
 - c. meter
6. develop a sensitivity to the implication of compact poetic expression and learn to draw inferences.
7. become acquainted with sea poems of five Pacific Northwest poets.



**ACTIVITY 1:
THE WORLD OF WATER
(1 DAY)**

ACTIVITY 1: THE WORLD OF WATER (1 DAY)

CONCEPTS:

1. The Earth is a water planet. Oceans cover approximately 70% of the earth's surface.
2. The ocean provides many resources including food, minerals, and other raw materials.
3. A basic understanding of the world of water enhances a student's appreciation of poetry about the sea.

OBJECTIVES:

- At the end of this activity, the student will be able to:
1. explain some basic characteristics of the sea such as the geology, currents, tides, zonation and life of the sea.
 2. name and locate on a map the major waterways of Puget Sound area.
 3. name at least four resources provided by the sea.
 4. name at least three ways the ocean/Puget Sound affects this area.
 5. discuss some of the dangers facing the marine environment and the concept of "trade-off" as it relates to the controversy of the use of the ocean's resources.

TEACHER

PREPARATION:

1. Read both teacher and student handouts, "World of Water."
2. Copy class set of World of Water.
3. Acquire a map of Washington State for bulletin board.
4. Class set of Washington State map provided with this unit.
5. Optional: Obtain a copy of Smithsonian magazine, Nov. 1979, Vol. 10, No. 8, pp. 116-122, which has an article by Athelstan Spilhaus, "To See the Oceans, Slice Up the Land." This article displays a new map created to show the world's seas properly.

MATERIALS:

1. Globe
2. Map of Washington state for bulletin board.
3. Optional: "To See the Oceans, Slice Up the Land."
4. Class set of Washington state map provided in this unit.
5. Class set of student handout, "World of Water."

PROCEDURES:

1. Using a globe, indicate the large portions of the earth which are water. Lead a discussion to introduce the idea that the earth is a water planet with 70% of the earth's surface covered by water. Optional: Use the map devised by Athelstan Spilhaus to further illustrate the ideas discussed. This could also lead to a discussion of how conventional maps distort the oceans.
2. Use the map of Washington to discuss the idea that the Puget Sound area has numerous bodies of water. Have students take time to locate the major lakes, rivers and channels in Puget Sound and label them on their maps. Discuss student experiences and observations of the Sound or ocean.

3. Have students read student handout, "World of Water." Lead a discussion on the many effects the ocean has on this area such as: 1) milder climate; 2) food resources; and 3) economy (fishing, shipping, tourism, etc.)
4. Lead a discussion about the different resources of the ocean (oxygen, food, minerals, raw materials) and the hazards of people's misuse of the sea such as 1) pollution (litter, dumping sewage, dumping chemicals, low-level radioactive matter, etc.); 2) oil spills; and 3) depletion of resources. Have students relate personal experiences with any of these types of misuse. What are some things that students could do to help with these environmental concerns?

EXTENDED ACTIVITIES:

1. Assign a brief descriptive composition on a personal experience on or in the water (a ferry ride, fishing, swimming, sailing, clam digging, etc.)
2. Assign a brief research paper or oral presentation on one or more resources provided by the waters of Puget Sound.
3. There are several marine issues being covered in the newspapers. Assign groups of students, taking turns different days or weeks, to collect articles from their newspapers or magazines on marine issues. Use a bulletin board to display the articles and have students lead class discussions on the issues involved.
4. Set up a panel or symposium of class members to research and present to the rest of the class a survey of issues and conflicts on ocean waters. Include: 1) Whaling (check with both Greenpeace and the Whaling Commission to hear both sides); 2) Tuna boats vs. porpoises; 3) Oil transporting vs. spillage; 4) Fishing limits; 5) The ocean as a food source; 6) The ocean as a source of energy; and 7) Law of the Sea Conference: Who has International Jurisdiction and Management Rights. (See the McKernan lectures, "Should We Cut Our Loses," available from University of Washington Sea Grant for about \$3.00.)

Teacher Information

WORLD OF WATER

The earth is a water planet; approximately 70% of the earth's surface is covered with water. In America, half of the population lives within an hour's drive of the sea or Great Lake shores. The marine environment (both fresh and salt water) clearly has a significant impact on our daily lives; we depend on it for energy, raw materials, food, transportation, creative inspiration . . . and the list continues.

When the world of water is studied in schools, it is most often included as a part of a science curriculum. Yet, with our expanding population and demands upon our water resources, an understanding of the sea and freshwater environments has become equally important in the study and application of economics, sociology, political science, history, literature and art.

The Sea in American Poetry looks at the sea as a subject and inspiration in literature. The more familiar students are with the marine environment, the more they will understand the inspiration behind and the imagery within poems about the sea.

A field trip to a beach would greatly enhance the student's experience with poems about the sea. It will prove beneficial whether as a reference point for some of the discussions, as an on-site writing trip, or as inspiration and reference for writing in the classroom. Marine Biology Field Trip Sites, another activity packet developed through ORCA, is recommended to help plan your field trip and choose a site appropriate for your goals. (Activity 5 contains poems of Northwest poets. It would be especially exciting to visit the places the poems are about.)

The student handout for this activity, "World of Water" provides some basic information about the sea. It by no means exhausts the information available nor the relevant topics, but is there to provide some general content as a springboard for exploring the sea poems. For more information see Randall's, Atlas of the Oceans or Noel P. Greis' Oceans (see bibliography). The ORCA marine education project has published three other high school curricula not previously mentioned: Marshes and Estuaries, Marine Biology Activities and Squalls on the Nisqually. These would also provide good marine education content as well as additional activities to use with your class.

NAME _____

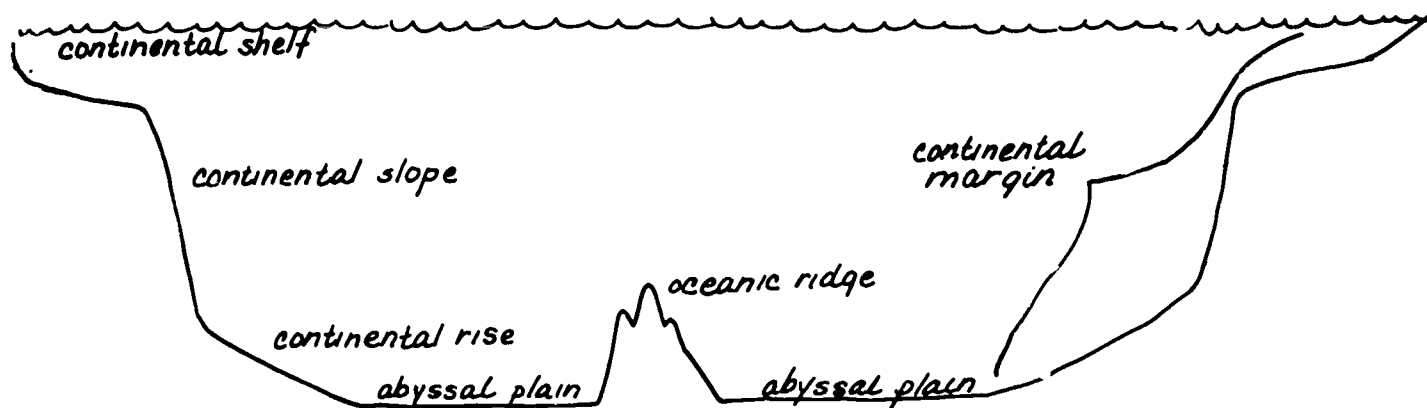
THE WORLD OF WATER

The world of water is a phrase used by marine educators to describe the earth. People have always been impressed by the vastness of oceans, but their size relative to the continents was made even more apparent to most of us when the earth was viewed from space. Photographs from space show the earth as a blue-green planet, with the continents occupying less than one third of the surface. In fact, the continents cover only 29.2% of the earth's surface.

In this unit, you will be looking at the world of water through the eyes of American poets. People have used the sea as a place to retreat and a source for creative inspiration. To more fully appreciate the imagery within and the inspiration behind their poems, it is helpful to have a basic understanding of the sea. This will be only a brief introduction to the marine environment. You are encouraged to research further any topic that interests you.

The Ocean Floor

When we look at the ocean, we see water. Underneath that water is a world with many of the same characteristics as our continents: mountains, volcanoes, plains, hills, etc. Picture the ocean floor as being the shape of a shallow soup plate.



The edge of the plate is where the continents meet the ocean, called the continental shelf. The continental margin is comprised of the continental shelf, continental slope and continental rise (see graphic above). The bottom part of the saucer represents the bottom of the ocean, or the abyssal plain. This plain is flat, except for in the center where there is a ridge of high volcanic mountains. In the Atlantic Ocean these mountains are called the mid-Atlantic ridge, and in the Pacific Ocean the more gently sloping ridge is called the East Pacific Rise.

The theory of plate tectonics is now the accepted explanation of how the earth's crust and the ocean floor is formed. According to this theory, the earth's surface is comprised of a number of rigid plates which are floating on the earth's soft interior and are constantly moving in reference to one another.

As two plates move apart, a crack forms at the mid-oceanic ridges. Liquid basalt, or lava, from the earth's mantle rises to fill the crack. As the lava solidifies, a new crust on the ocean floor forms. This process is called sea floor spreading. As the solidified lava moves away from the crack, the opposite edge of the plate pushes against an adjacent plate. The plates may buckle (the Himalayas were formed this way) or dive below one another forming a subduction zone. The Olympics were formed by sediments being scraped off during subduction. Puget Sound lowland trough was also formed by compression along a subduction zone.

Sea Water

If you've even been to the ocean or Puget Sound, you probably have discovered one characteristic of the water--it's salty. The water of the ocean contains three main salts, sodium chloride (table salt), and those formed from magnesium and calcium. These salts are liberated in the volcanic processes along the volcanic ridges in the ocean. The amount of salt in the ocean water is expressed by the term salinity. A typical salinity reading would be 35 0/00; or 35 parts per thousand grams of water. However, the salinity in the ocean will vary from place to place. For example, at the mouth of the Columbia, the salinity reading would be much lower because of dilution by the fresh water entering the ocean there.

Currents

Surface ocean currents, such as the westward extension of the Japanese Current which reaches the Washington coast, are created by the wind system. There are steady winds, which are caused by the differential heating of the earth's atmosphere, i.e., the difference between the temperature at the poles and the equator (due in large part to the spherical shape of the earth and the orientation to the sun). In simplified terms, warm air, such as at the equator, rises. The cooler air, from the poles, descends and moves to fill in the vacancy left by the rising warm air. This horizontal flow of the circular pattern of moving air is wind. This flow is broken into 3 cells in each hemisphere instead of a single pole to equator flow. These three cells form the wind belts known as the westerlies and polar easterlies.

As these winds move across the ocean, the water moves in the direction of the wind. However, because the water is blocked by the continents, they do not completely follow the path of the wind, but move in large circular patterns, called gyres.

The currents greatly affect the climate of an area. In the case of Washington state, even though it is as far north as Minnesota, the winters are much milder because the warm ocean water heats the air before it moves over western Washington. (This warm air is cooled as it rises to cross the mountains and loses its moisture, and thus eastern Washington has a much different climate.)

Another phenomenon related to wind is upwelling. This process occurs along the coast when water from the depths is brought to the surface. In the summer the winds generally come from the north. These winds push the surface water away from the shore. To replace the waters near the shore, cold waters of the ocean flow up from the depths.

The water from the depths of the sea is full of nutrients from decayed matter, which is brought up during this upwelling process and increases the productivity of the surface water where plants have sufficient light to grow.

Tides

Twice daily the ocean waters rise and fall in a rhythmical pattern called tides. Tides are controlled by a complex interaction between the sun, moon and the earth involving gravitational force. The moon, because of its relative closeness to the earth, exerts more influence over the tides than the sun. The gravitational pull of the moon on the earth causes two bulges of water (one on the side closest to the moon and one on the side farthest from the moon). Think of this as the moon pulling the nearest water (creating the bulge on the left) and the earth being pulled stronger than the farthest water, leaving a bulge on the right.



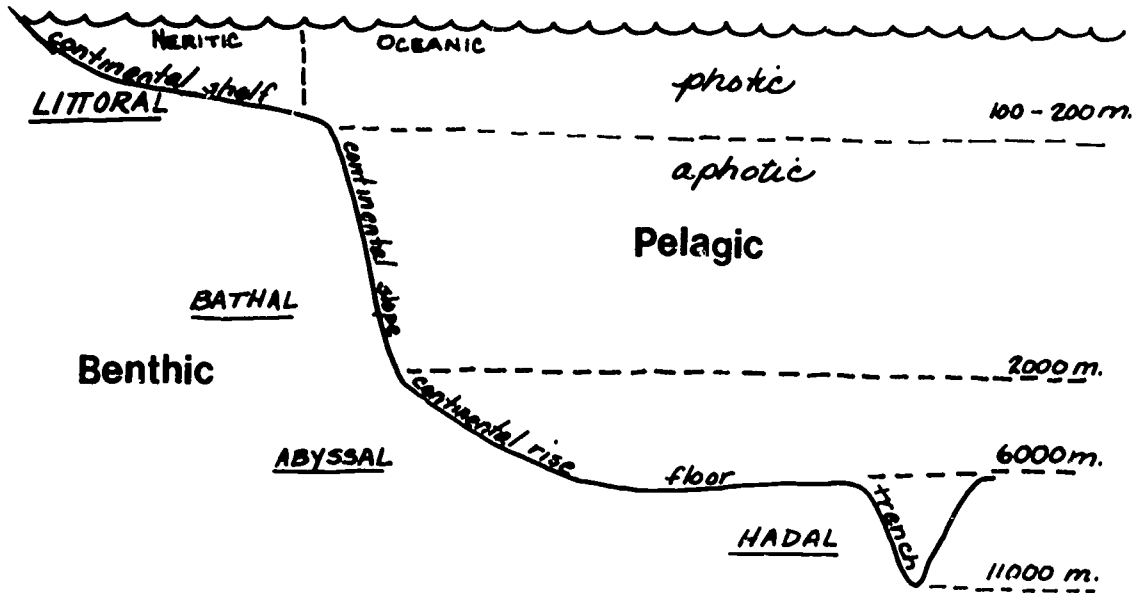
These bulgings are called high tides. The water tries to stay bulged toward and away from the moon while the earth rotates inside this tidal envelope. For every complete rotation of the earth, most places on earth experiences two high tides. Since the earth rotates once relative to the moon every 24 hours and 50 minutes, high tides are usually experienced every 12 hours and 25 minutes.

When the sun and moon are aligned with each other, the gravitational attraction is very strong and it produces the highest high tides and lowest low tides. These are called spring tides and occur every 14 days, or during full and new moon periods. Neap tides occur when the sun's and moon's gravitational pull work against each other (when they are at right angles to each other) causing little bulging and the highest low tides and lowest high tides. In fact, during neap tides there is little difference between high and low tides.

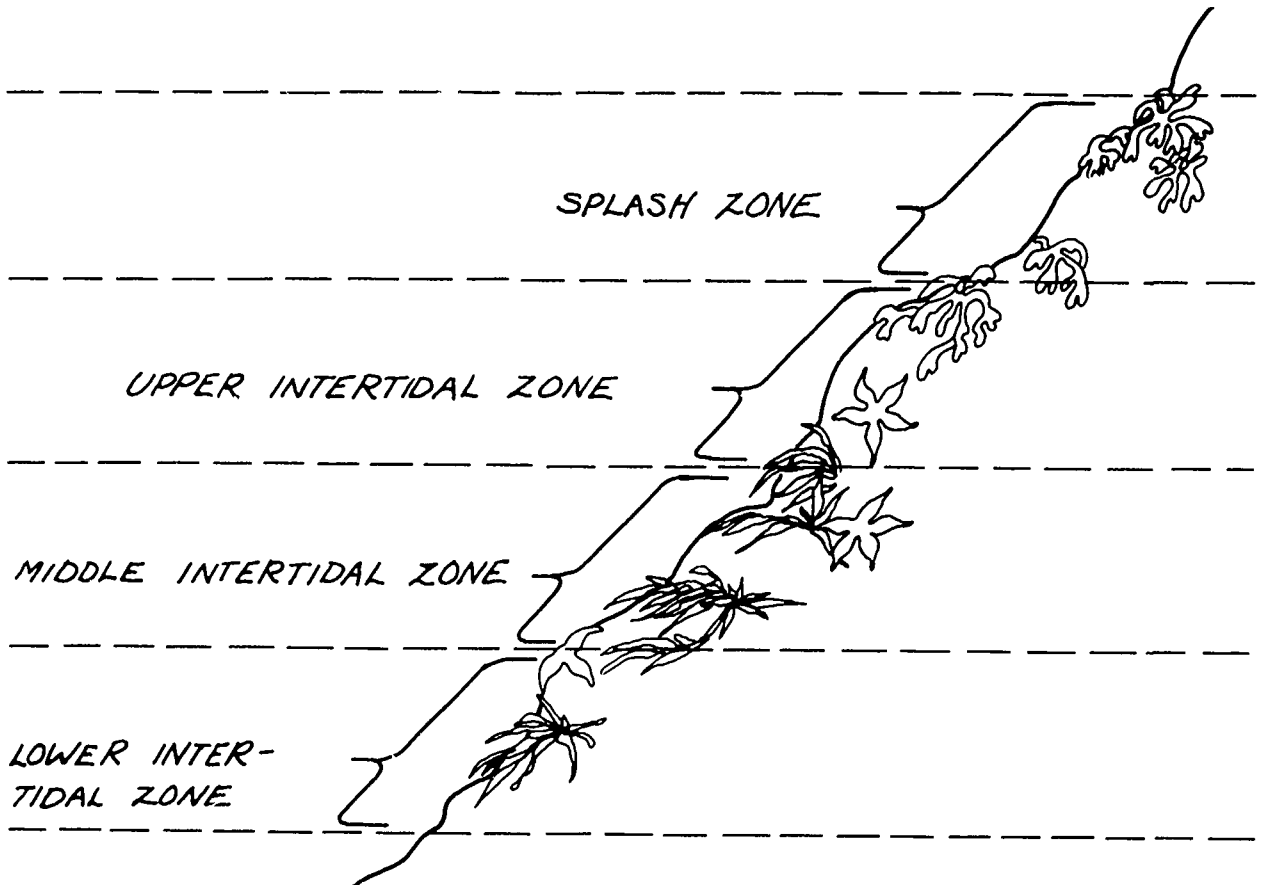
Ocean Life

One of the most fascinating and impressive aspects of the world of water is the incredible variety of life within and around, whether discovered while scuba diving, exploring during low tide or observing what washes up on the beach.

The waters of the ocean are divided into zones based on relative depth. The diagram below shows this classification.



The littoral zone, or sea-land interface, is the area between the mean high and mean low tide lines. The littoral zone is broken down further into other zones: Splash Zone, the Upper Intertidal, the Middle Intertidal and the Lower Intertidal Zones (open sea).



The Splash Zone (above the 10 foot mark at Seattle)* is a region which is only occasionally wetted by spray from surf when the tide is high. The sparse population of marine organisms must be able to endure very long periods of exposure to air (80% of the time or more), must face large fluctuations of temperature and solar radiation and exposure to fresh water during the rain.

The Upper Intertidal Zone (5 to 10 foot tide level at Seattle) is the upper tide pool region. Organisms here must be adapted to frequent, prolonged exposure to air (35 to 80% of the time).

The Middle Intertidal Zone (0 to 5 foot mark at Seattle) contains organisms that must be adapted to daily exposure to air (10 to 35% of the time) alternating with submersion in sea water.

The Lower Intertidal Zone (-4.7 to 0 foot mark at Seattle) is exposed to air only a few hours per month (not at all during some months). These organisms are exposed to the air only 10% of the time, or less.

Life in the ocean ranges from the tiny plankton to the Great Blue Whales. This life is dependent on what is called the food chain or, the order of what eats what. Starting at the bottom of the food chain, the phytoplankton (plant plankton) are eaten by the zooplankton (animal plankton) which are eaten by small fish, which are eaten by larger fish (salmon, tuna) which are in turn eaten by people, one of the highest on the food chain.

This chain is dependent on photosynthesis, the plant's food process whereby a plant takes in carbon dioxide and gives off oxygen. For photosynthesis to occur, there needs to be light energy. The most productive part of the ocean is in those areas where sunlight can penetrate the water and nutrients are supplied from below by upwelling or mixing. Below 100 meters from the surface, productivity is diminished because light is insufficient for photosynthesis. (This is not to say that in those depths there is no life--there is, though often of very bizarre forms.)

The World of Water as a Resource

People have used, appreciated and misused the world of water for many centuries. We depend on it as a food resource for fish, shellfish and some plants such as algae and seaweed. A good majority of the oxygen we breathe is produced by the phytoplankton. The ocean continues to serve as a mode of transportation. We look to the ocean for minerals (such as oil, nickel and magnesium-iron nodules) and raw materials of many kinds (cobalt, sulphur bromine).

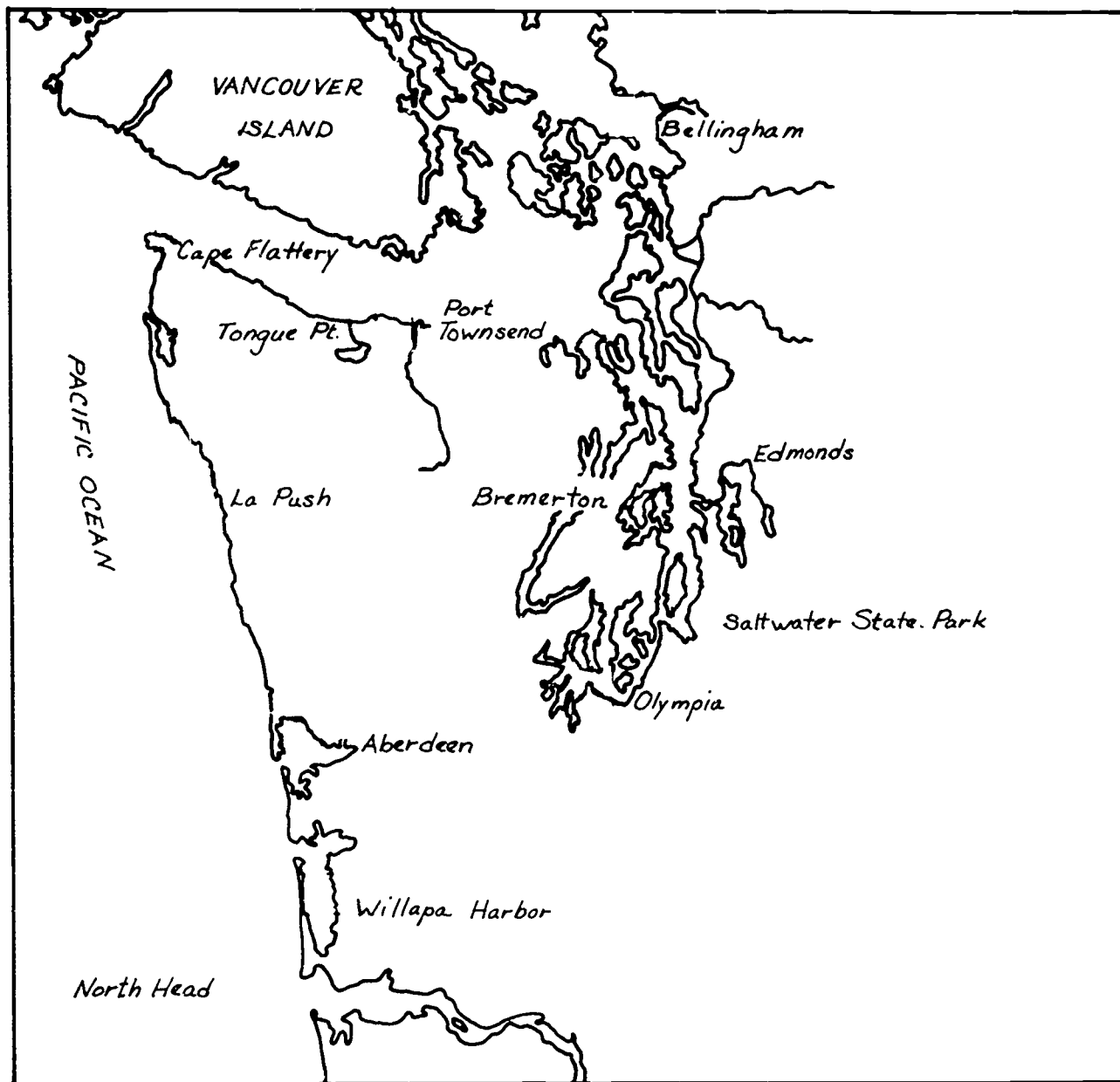
Yet, with our increasing population, the marine environment is becoming more threatened. We have come close to depleting resources, such as whales (see Activity 4). For too many years the vastness and seemingly indestructiveness of the sea and the "out-of-sight-out-of-mind" philosophy has allowed individuals and governments to dump their wastes into the sea whether in the form of litter, sewage, chemical or radioactive wastes. The results are now being felt. Some fish can not be eaten because the mercury level in them is too high. In Puget Sound some of the shellfish have been found to contain high levels of bacteria and recently the death of several hundred thousand salmon was caused by chemical poisoning from an accidental spill.

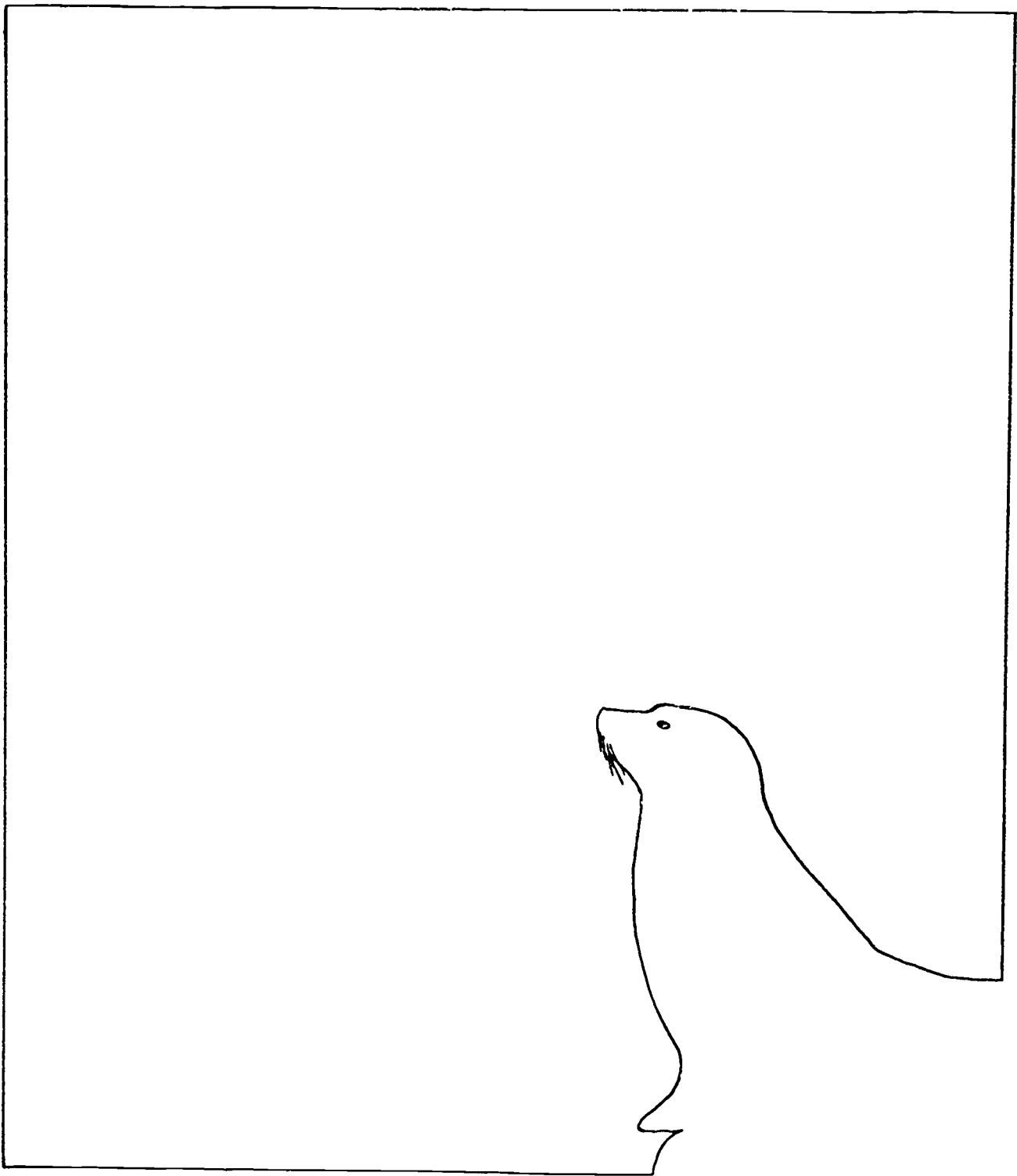
* Heights of tides are relative to the zero tide mark, which is the level of the water at mean lower low tide. A tide of -1.1 is 1.1 feet below mean lower low water.

The ocean helps meet our energy needs through off-shore drilling and the transporting of oil. Yet, oil spills can, and have destroyed the marine wildlife. Thermal pollution from power plants using water as a coolant is also of concern as it can drastically change the environment.

The solution for wise use of the oceans is not an easy one. Our life style demands the use of the ocean's resources. Yet, the exploitation needs to happen carefully. The trade-offs involved need to be examined and a plan for the judicious management of the resources developed. To upset nature's delicate and extremely complex balance may have severe consequences for the survival of the ocean itself and marine life. It is clear that to harm the world of water is to harm ourselves.

MAP OF WASHINGTON STATE





**ACTIVITY 2:
READING POETRY
(1 DAY)**

ACTIVITY 2: READING POETRY (1 DAY)

- CONCEPTS:**
1. The sea has been the subject of expression by many poets.
 2. Poetry should be read from punctuation mark to punctuation mark.
 3. In order to understand a poem's meaning, one must understand the meaning of the words in the poem; one should look up the definitions of unfamiliar words.
 4. A poet uses specific techniques in creating poetry; these techniques are named and can be recognized.
- OBJECTIVES:** Following this activity the student will demonstrate his/her ability to:
1. read a poem aloud, not dropping his/her voice at the end of each line of the poem unless there is punctuation indicating a stop or pause.
 2. identify examples of personification and metaphor.
 3. recognize rhyme.
 4. scan a line of poetry.
 5. identify the foot and meter of a poem.
- TEACHER PREPARATION:**
1. Read the teacher/student information sheet on the elements of poetry, "Tools of Poetry."
 2. Read student handout, "Reading Poetry"
 3. Read student handout, "Within the Wave."
- MATERIALS:**
1. A class set of student handout, "Reading Poetry."
 2. A class set of teacher/student information sheet, "Tools of Poetry."
- PROCEDURES:**
1. Lead a discussion to introduce these ideas:
 - a. Many poets find inspiration for their poetry in the sea? Why?
 - b. Ask the students for adjectives to describe the varying facets of the sea (timeless, ever-changing, powerful, etc.) Discuss, "How can the sea be each of these?"
 2. Distribute student/teacher information sheet, "Tools of Poetry." Discuss the different elements listed.
 3. Distribute and have students read student handout, "Reading Poetry."
 4. Distribute student handout, "Within the Wave." Have students read the poem silently. Now you read it aloud. Then ask one or two students to read it aloud. Did students get more information with each reading of the poem? Discuss guide questions at the end of the poem.
- EXTENDED ACTIVITIES:**
1. Borrow from the Seattle Library (or any other library) records of poets reading their own poetry. Many poets have recordings including Robert Frost, Theodore Roethke,

Dylan Thomas, Sylvia Plath and there are records of one person reading selections from a variety of poets. Listen to the records first, and select a few poems. Make a class set of the words to the poems (usually they are included with the record.) First have the students read the poems to themselves. Then, put on the record of the poets reading their poems. Did the poet read the poem differently than they did themselves. Did anything become clearer when they heard the poet read it? What words did the poet stress? What kind of intonation was used?

2. Ask students to create examples of personification and metaphor in sentences or in brief attempts at poetry.
3. Ask students to create examples of iambic pentameter, using the first line of "Within the Wave" as an example.
4. Ask students to select one body of water they visited or remember an experience on the ocean. Ask them to first describe in a paragraph or two what they remembered most about that place. Then ask them to try putting these same impressions and/or feelings into poetic verse. Example:

2 lines exhibiting rhyme:

I saw the rays of the setting sun
draw close together becoming one.

2 alliteration words: winging wave

personification: the fingers of waves
grasped for my toes

TOOLS OF POETRY

Figures of Speech

1. Simile-- a direct comparison of two dissimilar objects, using a connective word, usually as or like.

Her eyes are like stars that light the dark night.

"Sail flashing to the wind like weapons."
(Robert Hayden, "Middle Passage")

2. Metaphor--an implied comparison of two objects not using as or like.

"All the world's a stage"
(William Shakespeare, As You Like It)

"Death is the broom
I take in my hands
To sweep the world clean."
(Langston Hughes, "War")

3. Personification--attributing human qualities to non-human things.

The sun smiled; the flowers danced in the breeze.

"Into the jaws of Death
Into the mouth of Hell."
(Alfred Tennyson, "The Charge of the Light Brigade")

Rhyme

1. End Rhyme--rhyme occurring at the end of a verse line; the most common rhyme form.

"I was angry with my friend,
I told my wrath, my wrath did end."
(William Blake, "A Poison Tree")

". . . some where over a field hedge
a wild bird
will lift up a wild, wild throat
and that song heard
will stifle out this note."
(Hilda Doolittle, "Sigil")

Teacher/Student Information

NAME _____

2. Internal Rhyme--rhyme contained within a line of verse.

"Once upon a midnight dreary, while I pondered weak and weary
 Over many a quaint and curious volume of forgotten lore--
 While I nodded, nearly napping, suddenly there came a tapping,
 As of someone gently rapping, rapping at my chamber door."
 (Edgar Allan Poe, "The Raven")

3. Assonance--repetition of the same vowel sound within a line.

"Burnt the fire of thine eyes"
 (William Blake, "The Tiger")

4. Alliteration--repetition of the same initial consonant sound within a line of verse.

"Bright black-eyed creature, brushed with brown."
 (Robert Frost, "To a Moth Seen in Winter")

"He clasps the crag with crooked hands."
 (Alfred Tennyson, "The Eagle")

Meter

The meter of a poem is the pattern of stressed (/) and unstressed (v) syllables and helps create the rhythm of the poem. The meter of a poem can be analyzed by a technique called scansion. This is marking the stressed and unstressed syllables.

"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."
 (John Masefield, Sea Fever)

The meter of a poem is comprised of metric feet. A metric foot is the pattern of stressed and unstressed syllables. These are the basic patterns:

1. <u>Type of Metric Foot</u>	<u>Foot Pattern</u>	<u>Example</u>
a. Iambic	iamb:	bal-loon
b. Trochaic	trochee:	so-da
c. Anapestic	anapest:	con-tra-dict
d. Dactylic	dactyl:	yes-ter-day
e. Spondaic	spondee:	man-made

What type of metric feet did you find in the above poem? (iambic, anapestic, spondaic)

Line lengths are classified according to how many metric feet they contain. These are the basic line types. (It is rare that a line will contain more than eight metric feet.)

2. <u>Number of Metric Feet</u>	<u>Type of Line</u>
a. one foot	monometer
b. two feet	dimeter
c. three feet	trimeter
d. four feet	tetrameter
e. five feet	pentameter
f. six feet	hexameter
g. seven feet	heptameter
h. eight feet	octameter

The two of these classifications are put together to determine a type of line. For example, the following is a trochaic octameter:

"Once upon a midnight dreary, while I pondered weak and weary."

The basic metric pattern is a stressed syllable alternating with an unstressed syllable (/ ∪) and there are eight of those patterns in the line. An anapestic tetrameter would be made of four anapests as in the following:

"The Assyrian came down like the wolf on the fold"
(George Gordon, Lord Byron; "The Destruction of Sennacherib")

It is important to note that a poet won't always stick to a straight meter, but may use variation to add interest and create a special effect. If, for example, a poem was written in spondaic metric pattern, it would quickly become tiresome to the ear, like a woodpecker rapping on a tree. However, when used to break up another metric pattern, it draws attention to those words and can be very effective.

Use scansion to determine the metric pattern below:

"Because I could not stop for Death

He kindly stopped for me

The Carriage held but just ourselves

And immortality."

(Emily Dickinson, "Because I could Not Stop for Death")

1. What are the type of metric feet used in these lines?
(iambic)
2. How would you classify the first and third lines?
(iambic tetrameter)
3. How would you classify the second and fourth lines?
(iambic trimeter)

READING POETRY

How do you read a poem? Slowly, carefully, attentively and more than once. Poetry relies on sound as well as on meaning and therefore it is beneficial to read poems aloud. Or, if reading them silently, to at least sound the words in your mind.

For the first reading of a poem, read all the way through it, pausing as indicated by the punctuation. (At this point, don't worry about what the poem means or words you don't know.) Do not automatically drop your voice at the end of each line. Often the thought of a sentence or phrase is carried over to the next line. Read from punctuation mark to punctuation mark, pausing briefly for commas, and slightly more for periods, semi-colons, etc. In reading poetry which has no punctuation, it may take a few readings to determine the logical division of thought, i.e., to mentally insert the punctuation.

After the first reading, you most likely won't have realized the full richness of the poem, but you may have a good sense of the tone or mood of the poem. There may be something about the poem that especially struck you; perhaps some phrase that was especially pleasing (though you still may not know why). That's part of the beauty of good poetry, it reaches the subconscious and delights the senses, much like good music.

On the second reading, read for the exact sense of the words. If you don't know a word, or don't understand it in the poem's context, look it up. Often words have several meanings or connotations. Keep in mind that the poet picked that particular word because it best expressed the thought or feeling. If there are particular parts that are not clear to you, spend more time rereading them. Good poetry has more to be discovered with each reading.

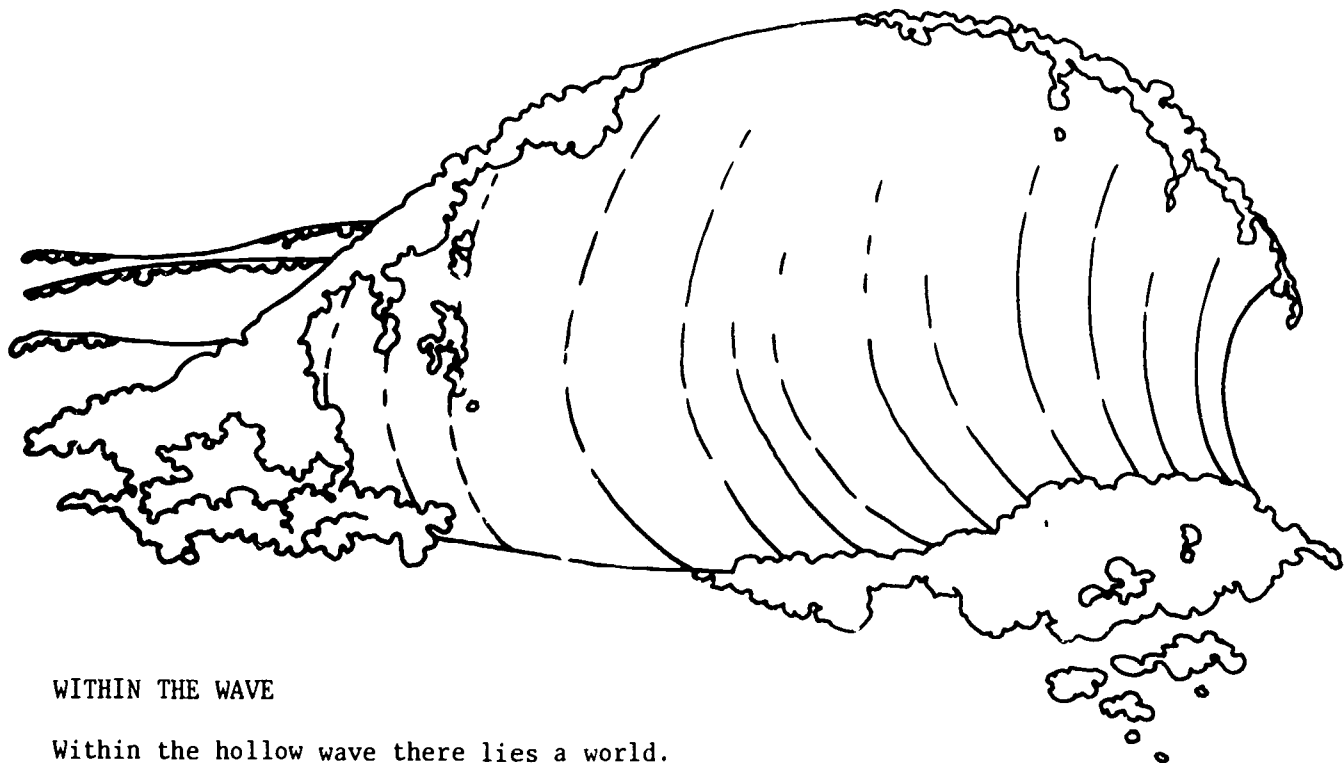
However, when looking closely at the poem and trying to understand its meaning, don't ignore your intuitive sense; it may be your best guide. Pay attention to how the poem affects you and how you read it. For example, what is the rhythm of the poem--is it fast, slow, does it change pace at any point? What affect does the rhythm have? What words do you stress when reading the poem? What is the mood of the poem? Are there words or phrases which feel soft or soothing to your ear? Words that feel harsh? What kind of feelings do you have when reading the poem? In other words, don't search so hard for the meaning that you miss out on the enjoyment of the poem. Poetry is not a code to be broken, but an artwork to experience.

Something else to keep in mind is that poetry can be ambiguous. A single line or phrase may evoke many different images and moods and suggest different ideas on different levels. There just may not be one right answer to the question, "what does this poem mean."

Teacher Information

WITHIN THE WAVE

Read the poem "Within the Wave" paying attention to the punctuation marks. Note: Words that are underlined are defined below--do not emphasize them when reading.



WITHIN THE WAVE

Within the hollow wave there lies a world.
 Gleaming glass-perfect, rising to be hurled
 Into a thousand fragments on the sand,
 Driven by tide's inexorable hand.
 Now in the instant while disaster towers, 5
 I glimpse a land more beautiful than ours;
 Another sky, more lapis-lazuli,
 Lit by unsetting suns; another sea
 by no horizon bound; another shore,
 Glistening with shells I never saw before 10
 Smooth mirror of the present, poised between
 The crest's "becoming" and the foam's "has been"--
 How luminous the landscape seen across
 The crystal lens of an impending loss!

By Anne Morrow Lindbergh

26 Teacher Information

- inexorable: unyielding
lapis-lazuli: an azure-blue to deep-blue gemstone (here used as the color of the stone)
luminous: full of light; clear
impending: likely to happen soon, imminent

1. At the end of which lines did you read on to the next line without stopping?
(lines 2, 8, 10, 11, and 13)
2. Read the poem again, this time concentrating on meaning. Check the definitions for underlined words below the poem.
 - a. What do the words "hollow wave" suggest to you?
(answers will vary--have students throw out any ideas and then take a closer look at their ideas.)
 - b. What is the "world" that lies within the wave that soon will "be hurled into a thousand fragments on the sand"?
(Literally: drops of water, plankton, etc. Figuratively, there could be many answers; life, dreams, society, etc.)
 - c. What comes to your mind when you read, "another sky . . . lit by unsettling suns," "another sea by no horizon bound," and "another shore, glistening with shells I never saw before?" What could these phrases be describing? (answers will vary--some ideas include heaven, utopia)

Now read the poem again, looking at the poet's use of rhyme, rhythm, and figurative language.

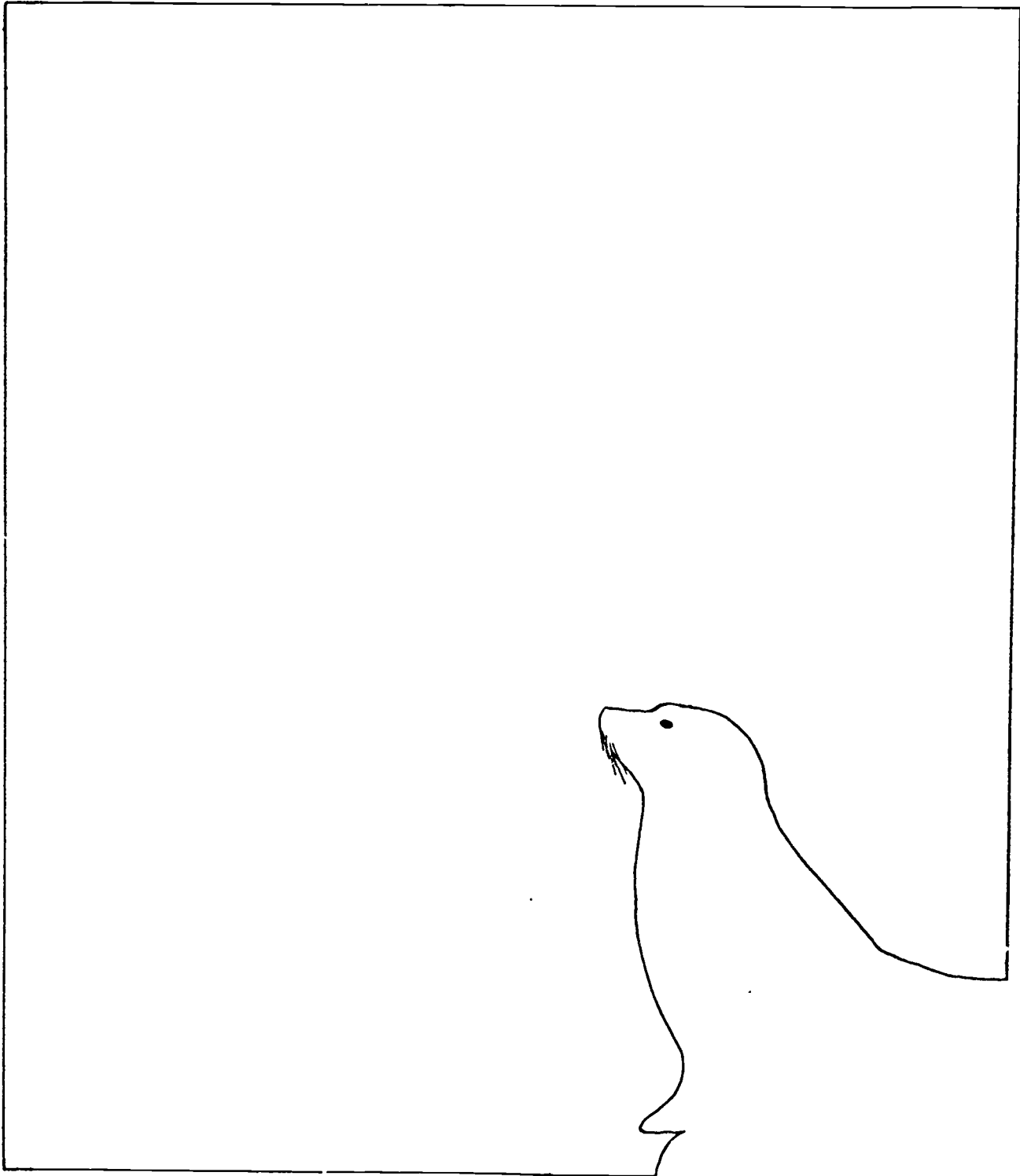
- a. What is the rhyme pattern?
(1st line rhymes with 2nd, 3rd with 4th, etc.)
- b. Do you hear a rhythm, a pattern of accented and unaccented syllables? Mark the accented syllable (/) in the first line. What is the pattern of accented and unaccented syllables in line one? With few exceptions this rhythmic pattern is carried throughout the poem. This pattern is called iambic pentameter.
- c. In line four, what word makes the ocean (the tide) seem like a person?
(using the word hand)
This figure of speech is called personification: attributed human characteristics to non-human beings.
- d. In line eleven, what does that poet call the wave? (She is implying a comparison between the wave and this object.)
(smooth mirror)
This figure of speech is called a metaphor" an implied comparison not using the word as or like.
- e. What words or phrases seem especially poetic to you (i.e., make this collection of words seem different than prose description)?
(answers will vary)

- inexorable: unyielding
lapis-lazuli: an azure-blue to deep-blue gemstone (here used as the color of the stone)
luminous: full of light; clear
impending: likely to happen soon, imminent

1. At the end of which lines did you read on to the next line without stopping?
2. Read the poem again, this time concentrating on meaning. Check the definitions for underlined words below the poem.
 - a. What do the words "hollow wave" suggest to you?
 - b. What is the "world" that lies within the wave that soon will "be hurled into a thousand fragments on the sand"?
 - c. What comes to your mind when you read, "another sky . . . lit by unsettling suns," "another sea by no horizon bound," and "another shore, glistening with shells I never saw before?" What could these phrases be describing?

Now read the poem again, looking at the poet's use of rhyme, rhythm, and figurative language.

- a. What is the rhyme pattern?
- b. Do you hear a rhythm, a pattern of accented and unaccented syllables? Mark the accented syllable (/) in the first line. What is the pattern of accented and unaccented syllables in line one? With few exceptions this rhythmic pattern is carried throughout the poem. This pattern is called iambic pentameter.
- c. In line four, what word makes the ocean (the tide) seem like a person?
 This figure of speech is called personification: attributed human characteristics to non-human beings.
- d. In line eleven, what does that poet call the wave? (She is implying a comparison between the wave and this object.)
 This figure of speech is called a metaphor" an implied comparison not using the word as or like.
- e. What words or phrases seem especially poetic to you (i.e., make this collection of words seem different than prose description)?



**ACTIVITY 3:
MOODS AND MAJESTY OF THE SEA
(2 DAYS)**

ACTIVITY 3: MOODS AND MAJESTY OF THE SEA (2 DAYS)

CONCEPTS:

1. The sea, in its restless nature, has many moods--some benevolent and peaceful, others malevolent and destructive.
2. Poems about the same topic may evoke very different feelings and use very different images.
3. Rhyme is not a necessary element in poetry; poetry without rhyme or meter is called free verse.

OBJECTIVES:

Following this activity, the student will demonstrate his/her ability to:

1. identify examples of alliteration, assonance, and simile.
2. compare and contrast two poems on a similar theme.
3. to understand that free verse does not contain rhymes nor specific meter, but is a special poetry form.

TEACHER PREPARATION:

1. Read all five parts of student activity 3, noting aspects of each poem to be discussed.
2. Order film "Sea Sorcery" (20 minutes, color) from Seattle Public Library.
3. Optional: Several artists have painted the different moods of the sea, including Turner, Winslow Homer, Andrew Wyeth and James Whistler. Borrow from the Seattle Art Museum slides of these artists' sea paintings (447-4673).
4. Order record "The Oceanides", by Jean Sibelius, from Seattle Public Library.

MATERIALS:

1. A class set of student activity 3, Parts 1 through 5.
2. Teacher/student information sheet on the elements of poetry from Activity 2: "Tools of Poetry."
3. Optional: Slides of the sea paintings
4. Optional: slide projector
5. A film projector and screen
6. A record player

PROCEDURES:

1. Introduce the following ideas:
 - a. The sea has many moods. Have students suggest words to describe the different moods of the sea they have seen.
 - b. Optional: Show slides of sea paintings by American artists. Discuss the various moods portrayed.
2. Play a recording of "Oceanides."
4. Show "Sea Sorcery."
5. Ask students to draw conclusions about artists and the sea. How might artists view the sea differently than a worker (who is tied to the sea for economic reasons) or a casual observer such as you or I?

**EXTENDED
ACTIVITIES:**

6. Distribute Parts 1-5 of the activity. Have students read each selection (preferably aloud) and discuss the questions at the end of each poem.
7. Discuss how the poems contrast the moods of the sea in Parts 2-5 of this activity and the mood evoked in the film. How do the moods of the poems compare to those in the paintings?
 1. Secure and play a recording of "La Mer," by Claude Debussy. Ask students to write a descriptive paragraph on the action of the sea they imagine while listening to the record.
 2. Ask students to list descriptive words that would create images of the sea in a peaceful mood and in a destructive mood.
 3. Ask students to create examples of alliteration, assonance, and simile.
 4. Have students look for advertisements in newspapers or magazines which use some of the techniques of poetry and label these techniques. Are they poetry? Discuss why these techniques might be used in advertisements.
 5. Ask students to listen to their records at home and bring in samples of songs (preferably about the sea) that they feel either are poetry put to music or verse (and not poetry). Compare the two types of songs. Discuss the moods created by the songs, and how these moods are achieved. What techniques are similar and dissimilar to poetry? If you have musicians in the class, you might suggest that they take a poem and put it to music. Afterwards, have them discuss the process and special considerations that were necessary.

AN INTRODUCTION TO FREE VERSE

Many modern poets write what is called free verse, or open form. These poems do not have end rhyme, nor a regular meter. However, free verse does not mean that things are thrown together haphazardly. They do have characteristics that distinguish their sound and effect on the reader from that of prose. Some characteristics that are important are:

Onomatopoeia:

This means words that represent a thing or action by imitating the sound associated with it. Common examples include words like 'boom,' 'pow,' or 'whiz'. In poetry onomatopoeia is also done with phrases and using such techniques as rhythm and repetition. For example, Denise Levertov's poem, "To the Reader" ends,

. . . the sea is turning its dark pages
turning
its dark pages.

The repetition and the stress on "turn" followed by a number of unstressed syllables suggests the rise and fall of waves.

Rhythm

The rhythm of the poem may be fast or slow, the sentences short or long, words stressed or unstressed. This is not accidental, but used by the poet to achieve a particular effect.

Repetition:

Words, phrases, sentences, or sentence structure are often repeated to obtain different effects. For example, repetition may result in certain words being stressed, or creating onomatopoeia as mentioned above.

Line Breaks

Although free verse does not have end-rhymes, their line-ends are usually not arbitrary. Some poets choose to end on the strongest word in the line, others end at a point where a brief pause would be normal in speech, others for suspense, breaking at a point which makes the reader wonder what's coming next.

Half Rhyme

Although free verse does not use end rhyme, it often does use what is called half rhyme. This is when the final consonant sounds are the same, but the vowel sounds are different. For example, in the following poem bird and guard are half rhymes, wet and forget are end rhymes.

But over the dead leaves in the wet
The mouse goes snooping, and the bird
Something the voiceless earth does not forget
They came to guard . . .

James Wright, "At Thomas Hardy's Birthplace," 1953

MOODS AND MAJESTY OF THE SEA

Each poem in this section reflects the poet's creative response to the wonder and beauty of the sea and to its many moods.

Read each poem carefully for meaning and analysis. Be prepared to answer the discussion questions at the end of each selection.

Part One

THIS GREAT AND WIDE SEA

O Lord, how manifold are Thy works!
In wisdom has Thou made them all;
The earth is full of Thy riches.
So is this great and wide sea,
Wherein are things creeping innumerable,
Both great and small beasts.

From Psalm 104

1. What mood is reflected in this poem? What words help evoke this mood?
(mood of wonder, appreciation -- words such as manifold, riches, great, etc.)
2. Is this free verse or structured poetry? Why?
(Free verse, it doesn't use rhyme or regular meter, but does use poetic language.)
3. This poem addresses the sea as primarily a home or heaven for "beasts." Has our attitude toward the "riches" of the ocean changed at all? Explain.
(Answers will vary -- perhaps today we see it as more than just a home for beasts but also for the other resources it provides and purposes it serves.)

Teacher Information

Part Two

WINTER OCEAN

Many-maned scud-thumper, tub
 of many whales, maker of worn wood, shrub-
 ruster, skymocker, rave!
 portly pusher of waves, wind-slave.

By John Updike

1. Alliteration is the repetition of the same initial consonant sound (big black, burly bear). Can you find examples of alliteration in this poem?
(many-maned, worn wood, portly pusher, waves wind, etc.)
2. Assonance is the repetition of the same vowel sound (a gay day in May). What examples of assonance do you see?
(Scud-thumper tub, many whales maker, shrub-ruster, etc.)
3. Find and briefly illuminate two metaphors in the poem.
(answers will vary)
4. What examples of onomatopoeia do you hear in the poem?
(scud-thumper, pusher of waves, etc.)
5. Read this poem aloud in various tones of voice. How do you suppose the poet expected it to be read. What tells you this? How would you summarize his attitude toward the winter ocean?
(The lines run-on and it is read relatively quickly and powerfully, like the winter ocean. Some lines, like "pusher of waves" sound like the wind pushing waves. This poem is written to enjoy saying out loud.)

Part Three

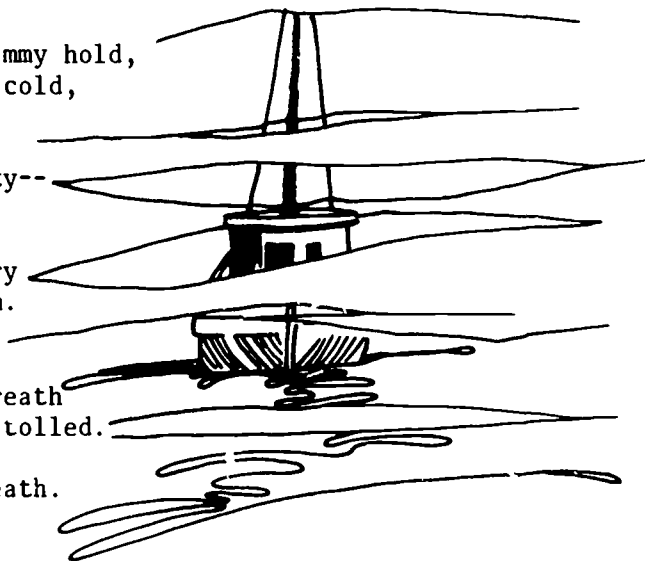
FOG

Over the oily swell it heaved, it rolled
 Like some foul creature, filmy, nebulous.
 It pushed out streaming tentacles, took clammy hold,
 Swaddled the spars, wrapped us in damp and cold,
 Blotted the sun, crept round and over us.

Day long, night long, it hid us from the sky--
 Hid us from sun and stars as in a tomb.
 Shrouded in mist a berg went groaning by.
 Far and forlorn we heard the blind ships cry
 Like lost souls wailing in a hopeless gloom.

Like a bellwether clanging from the fold,
 A codder called her dories. With scared breath
 The steamer sirens shrieked; and mad bells tolled.
 Through time eternal in the dark we rolled
 Playing a game of Blind-Man's-Bluff with Death.

By Crosbie Garstin



FOG

The fog comes
 on little cat feet
 It sits looking
 over harbor and city
 on silent haunches
 and then moves on.

By Carl Sandburg

1. Compare the moods of the two poems on fog. What are some of the words or phrases that might create the mood. (*1st one: dark, menacing mood. words like foul creature, clammy hold etc. 2nd one: light mood--cat feet, silent haunches*)
2. Who are the speakers in the two poems and what is their relationship and to the sea? How might that effect their view of the fog?
One is a commercial fisherman; the other a casual observer. One is stuck in the fog and it presents a danger; the other is charmed by it.)
3. A simile is a direct comparison using as or like. Find some similes used in these poems. What two items are being compared in each simile?
(Like some foul creature, as in a tomb, etc.)
4. Find examples of personification.
(took clammy hold, wrapped us, blind ships cry, with scared breath, etc.)
5. What words, especially verbs, sound like what they describe in Garstin's "Fog"? (*swaddled, shrieked, etc.*)
6. What are the rhyme patterns in the two poems (if any)?
(In Garstin's "Fog" the 1st, 3rd and 4th rhyme together, and the 2nd and 5th line rhyme. In Sandburg's "Fog" there is no end rhyme.)

Teacher Information

Part Four

VOYAGES I

Above the fresh ruffles of the surf
 Bright striped urchins flay each other with sand.
 They have contrived a conquest for shell shucks,
 and their fingers crumble fragments of baked weed
 Gaily digging and scattering.

And in answer to their treble interjections
 The sun beats lightning on the waves,
 The waves fold thunder on the sand;
 And could they hear me I would tell them:

O brilliant kids, frisk with your dog,
 Fondle your shells and sticks, bleached
 By time and the elements; but there is a line
 You must not cross nor ever trust beyond it
 Spry cordage of your bodies to caresses
 Too lichen-faithful from too wide a breast.
 The bottom of the sea is cruel.

By Hart Crane

1. What is the poet's attitude toward the sea? How do you know this.
(One of respect; fear. The last stanza gives his warning of the dangers and power of the ocean.)
2. On what kind of words does Crane choose to end his lines?
(He ends the line on nouns, which emphasizes these words.)
3. To illustrate the difference between prose and poetry, 'translate' Crane's poem into prose. For example, the first two lines could be: There are some kids in striped clothing playing on the beach. They laugh as they throw sand on each other while digging for shells. Try to not change the meaning of the poem, but the structure and order of words. Read your prose and then read the poem. Do they say approximately the same thing (they should). Discuss some of the differences between the two writings.

Part Five

SEA LULLABY

The old moon is tarnished
 With smoke of the flood,
 The dead leaves are varnished
 With color like blood,

A treacherous smiler
 With teeth white as milk,
 A savage beguiler
 In sheathings of silk.

The sea creeps to pillage,
 She leaps on her prey;
 A child of the village
 Was murdered today.

She came up to meet him
 In a smooth golden cloak,
 She choked him and beat him
 To death, for a joke.

Her bright locks were tangled,
 She shouted for joy,
 With one hand she strangled
 A strong little boy.

Now in silence she lingers
 Beside him all night
 To wash her long fingers
 In silvery light.

By Elinor Wylie

1. What mood is established immediately by the words "Old moon," "tarnished," "dead leaves," and "blood"? What does this mood reflect about the poet's attitude towards the sea? (*The mood portrayed is rather grim. The poem focuses on the destructive and dangerous aspects of the ocean.*)
2. This poem embodies an extended metaphor. To what is the sea compared and what are some of the comparisons. (*The sea is compared to a murderess. Some comparisons are: treacherous smiler, she leaps on her prey, she choked him and beat him, etc.*)
3. How is the title of the poem ironic? (*A lullaby is soothing; this is horrifying--more likely to produce nightmares than sweet dreams.*)
4. Compare the tone and theme of this poem with "Voyages I" by Hart Crane. (*Both display fear of the sea and its power, but Crane's poem also shows that the sea can be enjoyed.*)
5. Examine the rhyme pattern and identify the two feet used in each line. (*The 1st and 3rd lines rhyme; the 2nd and 4th lines rhyme. The metric feet are iambs and anapests.*)

MOODS AND MAJESTY OF THE SEA

Each poem in this section reflects the poet's creative response to the wonder and beauty of the sea and to its many moods.

Read each poem carefully for meaning and analysis. Be prepared to answer the discussion questions at the end of each selection.

Part One

THIS GREAT AND WIDE SEA

O Lord, how manifold are Thy works!
In wisdom has Thou made them all;
The earth is full of Thy riches.
So is this great and wide sea,
Wherein are things creeping innumerable,
Both great and small beasts.

From Psalm 104

1. What mood is reflected in this poem? What words help evoke this mood?
2. Is this free verse or structured poetry? Why?
3. This poem addresses the sea as primarily a home or heaven for "beasts." Has our attitude toward the "riches" of the ocean changed at all? Explain.

NAME _____

Part Two

WINTER OCEAN

Many-maned scud-thumper, tub
 of many whales, maker of worn wood, shrub-
 ruster, skymocker, rave!
 portly pusher of waves, wind-slave.

By John Updike

1. Alliteration is the repetition of the same initial consonant sound (big black, burly bear). Can you find examples of alliteration in this poem?
2. Assonance is the repetition of the same vowel sound (a gay day in May). What examples of assonance do you see?
3. Find and briefly illuminate two metaphors in the poem.
4. What examples of onomatopoeia do you hear in the poem?
5. Read this poem in various tones of voice. How do you suppose the poet expected it to be read? What tells you this? How would you summarize his attitude toward the winter ocean?

Part Three

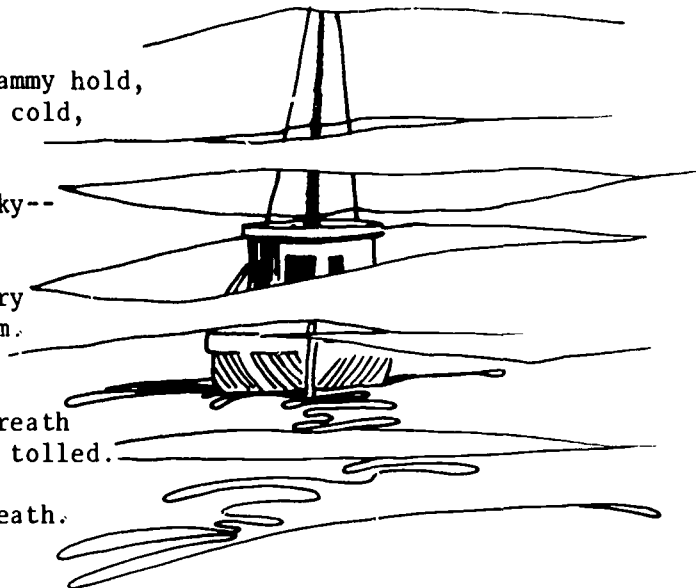
FOG

Over the oily swell it heaved, it rolled
 Like some foul creature, filmy, nebulous.
 It pushed out streaming tentacles, took clammy hold,
 Swaddled the spars, wrapped us in damp and cold,
 Blotted the sun, crept round and over us.

Day long, night long, it hid us from the sky--
 Hid us from sun and stars as in a tomb.
 Shrouded in mist a berg went groaning by.
 Far and forlorn we heard the blind ships cry
 Like lost souls wailing in a hopeless gloom.

Like a bellwether clanging from the fold,
 A codder called her dories. With scared breath
 The steamer sirens shrieked; and mad bells tolled.
 Through time eternal in the dark we rolled
 Playing a game of Blind-Man's-Bluff with Death.

By Crosbie Garstin



FOG

The fog comes
 on little cat feet
 It sits looking
 over harbor and city
 on silent haunches
 and then moves on.

By Carl Sandburg

1. Compare the moods of the two poems on fog. What are some of the words or phrases that might create the mood.
2. Who are the speakers in the two poems and what is their relationship and to the sea? How might that effect their view of the fog?
3. A simile is a direct comparison using as or like. Find some similes used in these poems. What two items are being compared in each simile?
4. Find examples of personification.
5. What words, especially verbs, sound like what they describe in Garstin's "Fog"?
6. What are the rhyme patterns in the two poems (if any)?

Part Four

VOYAGES I

Above the fresh ruffles of the surf
 Bright striped urchins flay each other with sand.
 They have contrived a conquest for shell shucks,
 and their fingers crumble fragments of baked weed
 Gaily digging and scattering.

And in answer to their treble interjections
 The sun beats lightning on the waves,
 The waves fold thunder on the sand;
 And could they hear me I would tell them:

O brilliant kids, frisk with your dog,
 Fondle your shells and sticks, bleached
 By time and the elements; but there is a line
 You must not cross nor ever trust beyond it
 Spry cordage of your bodies to caresses
 Too lichen-faithful from too wide a breast.
 The bottom of the sea is cruel.

By Hart Crane

1. What is the poet's attitude toward the sea? How do you know this.
2. On what kind of words does Crane choose to end his lines?
3. To illustrate the difference between prose and poetry, 'translate' Crane's poem into prose. For example, the first two lines could be: There are some kids in striped clothing playing on the beach. They laugh as they throw sand on each other while digging for shells. Try to not change the meaning of the poem, but the structure and order of words. Read your prose and then read the poem. Do they say approximately the same thing (they should). Discuss some of the differences between the two writings.

Part Five

SEA LULLABY

The old moon is tarnished
With smoke of the flood,
The dead leaves are varnished
With color like blood,

A treacherous smiler
With teeth white as milk,
A savage beguiler
In sheathings of silk.

The sea creeps to pillage,
She leaps on her prey;
A child of the village
Was murdered today.

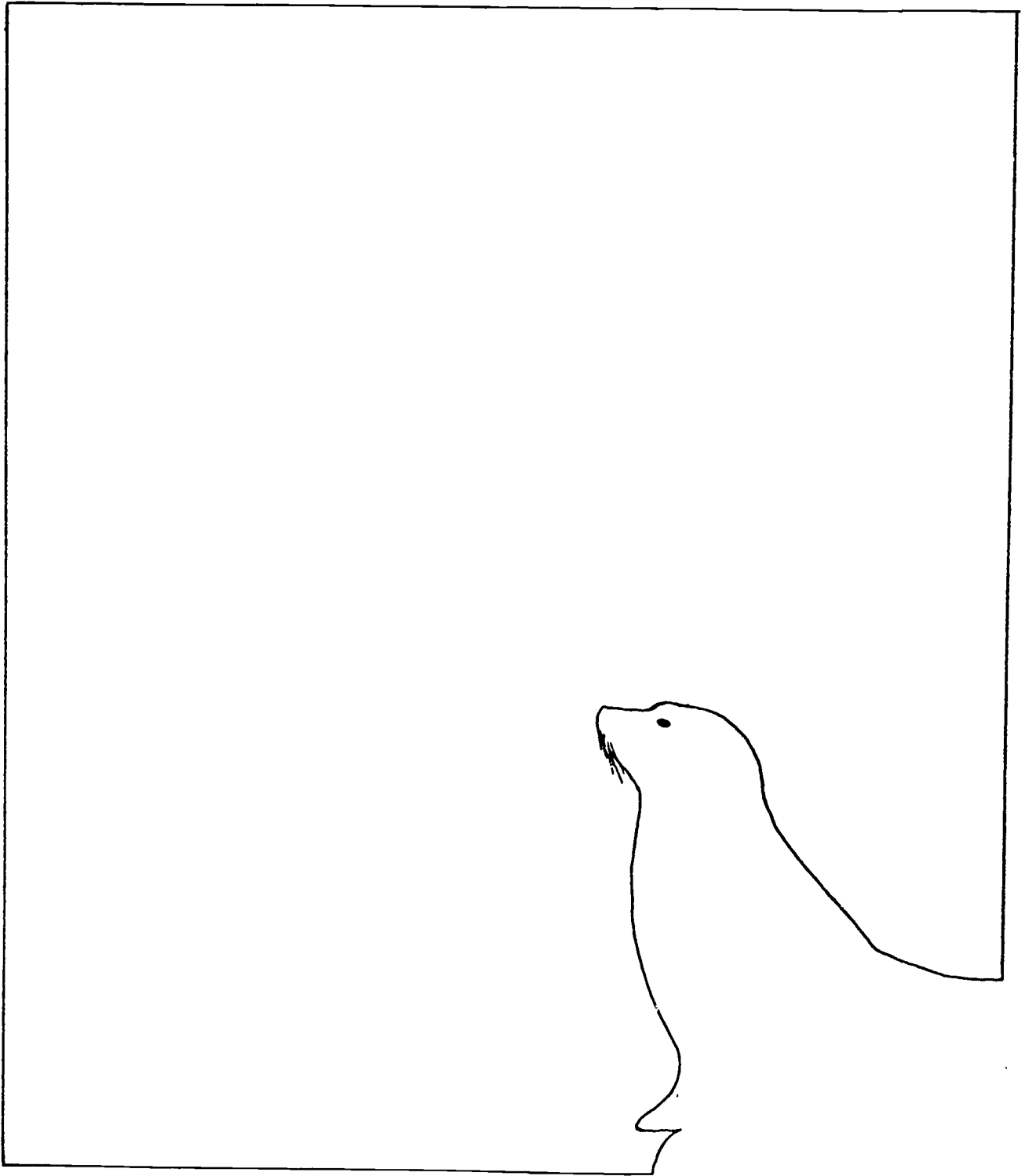
She came up to meet him
In a smooth golden cloak,
She choked him and beat him
To death, for a joke.

Her bright locks were tangled,
She shouted for joy,
With one hand she strangled
A strong little boy.

Now in silence she lingers
Beside him all night
To wash her long fingers
In silvery light.

By Elinor Wylie

1. What mood is established immediately by the words "Old moon," "tarnished," "dead leaves," and "blood"? What does this mood reflect about the poet's attitude towards the sea?
2. This poem embodies an extended metaphor. To what is the sea compared and what are some of the comparisons.
3. How is the title of the poem ironic?
4. Compare the tone and theme of this poem with "Voyages I" by Hart Crane.
5. Examine the rhyme pattern and identify the two feet used in each line.



**ACTIVITY 4:
THE WORLD BELOW THE BRINE
(2 DAYS)**

ACTIVITY 4: THE WORLD BELOW THE BRINE (2 DAYS)

CONCEPTS:

1. People, terrestrial creatures, share the earth with innumerable marine species of infinite variety.
2. People, in their exploitation of marine species, specifically the whale, have caused a depletion of certain species populations that abounded in the oceans.

OBJECTIVES:

- In the process of this activity the student will demonstrate his/her ability to:
1. discern the poetic elements of free verse.
 2. determine the mood of a poem.
 3. respond to the expression of human exploitation of the whale.

TEACHER

PREPARATION:

1. Read all four parts of student activity, "World Below the Brine" noting aspects of each poem to be discussed. Copy class set of this activity.
2. Order film "Mysteries of the Deep" (24 minutes, color) from Seattle Public Library.
3. Order film "The Sperm Whale" (22 minutes, color) from Seattle Public Library.
4. Read Student/Teacher Information sheet on "Cetaceans" from The Rand McNally Atlas of the Oceans, p. 72.

MATERIALS:

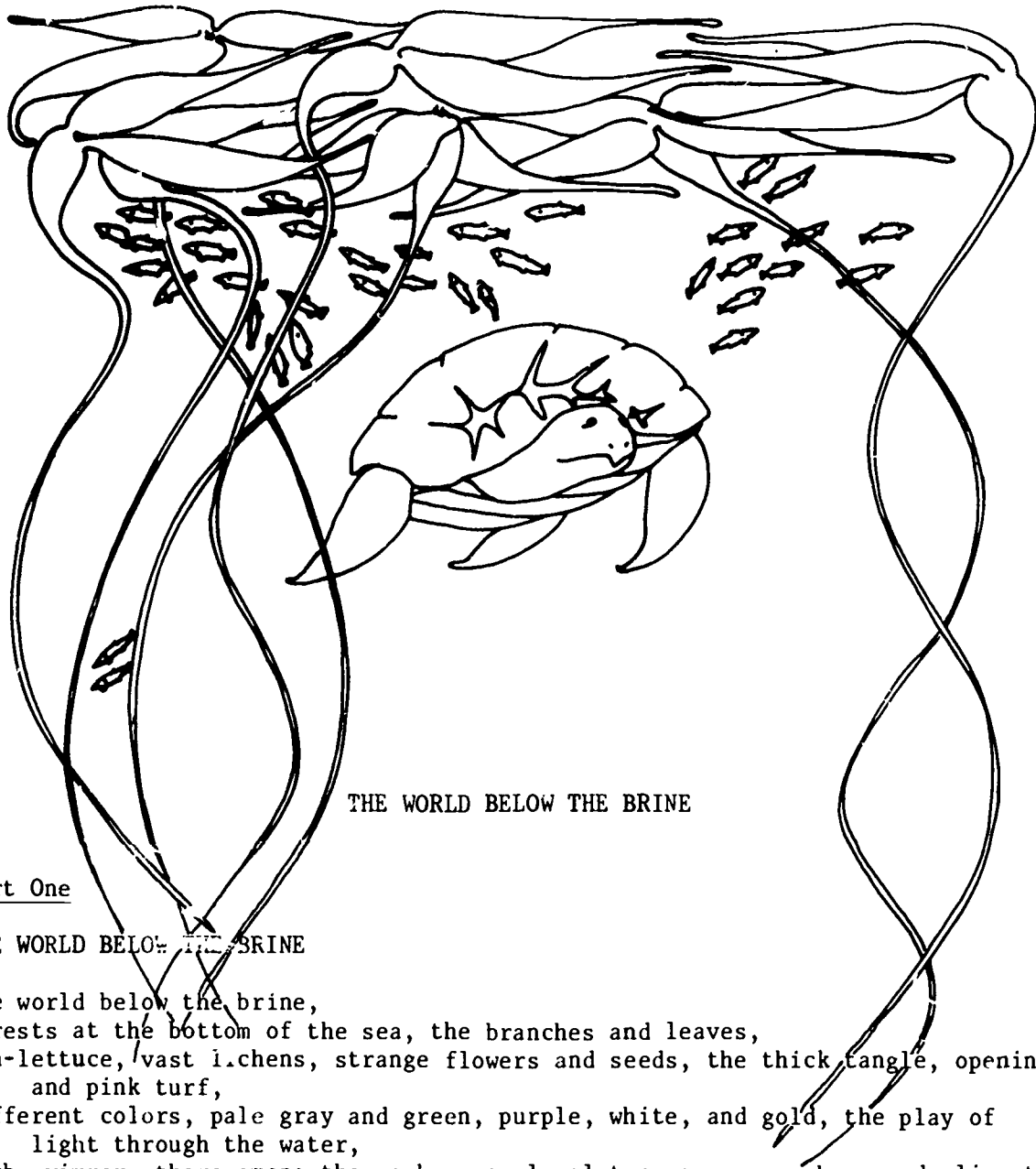
1. A class set of student activity, "World Below the Brine" Parts 1 through 5
2. Class set of student information, "Cetaceans."
3. A film projector
4. A record player

PROCEDURES:

1. Lead a discussion to introduce this idea: The "world below the brine"--the sea--is the home of myriad species of life of great beauty and variety. What different marine animals have students seen or heard about?
2. Show the film "Mysteries of the Deep" to illustrate visually the content of your discussion.
3. Distribute parts 1 - 4 of "World Below the Brine." Have students read each selection and discuss the questions on each poem.
4. Show the film "The Sperm Whale".
5. Lead a discussion on the contrast between the exploitation of the whale as expressed in the two poems and the attempts at conservation of the whale as expressed in the film by Jacques-Yves Cousteau.
6. Pass out student handout, "Killer Whale." Ask students to express in a poem the information, a feeling about the information, or an attitude toward the information.

**EXTENDED
ACTIVITIES:**

1. Select a beach field trip site. (ORCA publication Marine Biology Field Trip Sites would prove helpful in selecting the site. Beach Profiles and Transects, another ORCA publication, would be helpful in discussing the different animals seen and why those animals are where they are-- e.g. beach zonation.) Be sure to check the tidal chart and plan the trip at low tide. Have students explore the many marine animals and then pick one animal to write about in a poem. They may wish to begin by carefully examining the animal and its habitat and jotting down words and brief impressions. These ideas can then be put together into a poem back at school.
2. Play a recording of "And God Created Great Whales", by Alan Hovhannes (Seattle Public Library). Ask students to compose a descriptive responses to the music and whale sounds.
3. Ask students to write and share with the class their descriptions of monstrous or bizarre sea creatures.
4. Have students rcsearch and report their findings about other sea creatures that may be endangered.
5. Obtain a guest speaker to talk about whales and the Pacific Northwest. (Contact University of Washington, Dept. of Oceanography; Seattle Aquarium; Greenpeace; etc.)
6. For additional poems about the sea and its inhabitants, contact the Pacific Science Center for a copy of the junior high Activity Packet, Literature and the Sea developed by Project ORCA.



THE WORLD BELOW THE BRINE

Part One

THE WORLD BELOW THE BRINE

The world below the brine,
 Forests at the bottom of the sea, the branches and leaves,
 Sea-lettuce, vast lichens, strange flowers and seeds, the thick tangle, openings,
 and pink turf,
 Different colors, pale gray and green, purple, white, and gold, the play of
 light through the water,
 Dumb swimmers there among the rocks, coral, gluten, grass, rushes, and aliment
 of the swimmers,
 Sluggish existences grazing there suspended, or slowly crawling close to the
 bottom,
 The sperm whale at the surface blowing air and spray, or disporting with his
 flukes,
 The leaden-eyed shark, the walrus, the turtle, the hair sea-leopard, and the
 sting-ray,
 Passions there, wars, pursuits, tribes, sight in those ocean-depths, breathing
 that thick-breathing air, as so many do,
 The change thence to the sight here, and to the subtle air breathed by beings
 like us who walk this sphere,
 The change onward from ours to that of beings who walk other spheres.

By Walt Whitman

1. What elements do you see that distinguish this free verse selection as poetry? (*Answers may include: imagery, such as "forests at the bottom of the sea, leaden-eyed shark, etc; alliteration--pale, gray, play; the rhythm of the poem etc.*)
2. This poem was written in the late 1800's. Can you see a new or different interpretation of "forests at the bottom of the sea?" (*Answers will vary-- could involve idea that the ocean is being explored as a potential place to live.*)
3. How does this poet teach you about the world below the brine? (*Using imagery and other poetic techniques, the poem describes both the plants and animals of the sea, and then discusses its relationship to people.*)

Teacher Information

Part Two

OUTER SPACE, INNER SPACE

Expecting no miracles, we walked
 beside the water, resting in
 ourselves and a vacant stretch
 of sand along Puget Sound.
 At the edge of a tide pool a green
 iridescent worm wound
 in slow grace its segmented
 length over fields of black
 cobblestone dollars, crabs, both
 purple and brown, blue
 mussels, snails, kelp
 in ribbons of red and green.
 You walked ahead while I,
 sprawled on a tangle of wood,
 feeling heavy and loose, ripe
 as a vegetable among club fern,
 dandelions, broom, and wild roses,
 looked back where our footsteps went
 in pairs, two lines parallel.

A gull, screeching like iron
 in an old hoist, patrolled
 where you stood and waited for me.
 You had found a nest, pink
 with tumbling baby shrimp.
 We watched them tuck and burrow.
 With care, you lifted their rock,
 swaddled in kelp and venerable
 in studded barnacles
 and placed it as you'd found it.
 We saw the urchin stars
 that ringed its base unfold
 and take their colors.

Night came with a deeper gray
 and settled in, turning
 the clam shells white as thoughts.
 Pointing to the pale shell
 of moon you said, "Those three
 are on their way home now, "
 and I pointed to Venus,

Remembering how it was
 watching the hump-back shrimp
 wiggling in unaccustomed light,
 each carapace pink and delicate,
 almost transparent. I dreamt of hands
 swimming in new air
 before eyes that take their color
 from the slate-blue shades of the sea.

Teacher Information

Heading back, we saw our tracks,
in two lines, parallel.
They stretched until they seemed
to converge where we began.

Gladys Cardiff

1. Find examples of simile.
(Similes: ripe as a vegetable, screeching like iron in an old hoist, turning the clam shells white as thoughts.)
2. This poem describes many different aspects of the marine environment. Which images most appealed to you?
(Answers will vary.)
3. Compare this poem to "World Below the Brine." Consider both style and content. *(Some ideas: both describe the marine environment and both are written in free verse. They also relate the sea to time and human life; Whitman in history, Cardiff to birth/cycle of life. The rhythm and feeling of the two poems are very different.)*
4. Reread the last two stanzas. What do they suggest to you? How do they relate to the rest of the poem, and how are they set apart?
(Answers will vary. One may be birth: being in the womb being compared to the shrimp and talking about the cycle of life. The beginning of the poem is very descriptive about marine life; the last stanza is more of a metaphor and a complex idea.)

Teacher Information

Part Three

THIS POEM IS NOT ABOUT WHALES

it is not about the carve
 and slash of knives
 it is not a lament
 for ruthless bastards
 thinking profit and blubber
 in the same fat breath
 it is not a digression
 on slabs of flesh
 computed in clicking brains
 coming up crisp seen
 and competitive
 nor is it about guts and entrails
 sprawling across snowscapes
 not about crimson rorschach shapes
 in virgin white
 not about the madness
 of slip and sever
 not about whales
 not about whales

By Judith Fitzgerald, who is a Canadian

1. What is the mood of the poet in writing this poem? Point out specific words or lines to substantiate your answer. (*The mood is harsh, satiric. Words include: carve and slash of knives; ruthless bastard, slabs of flesh.*)
2. Using the information from "Cetaceans," what are the facts about whales and whaling contained in this poem?
 (*Whaling is done for profit, and blubber is one resource; whaling is done in the north seas, with whales parts being in the snow.*)
3. Would you say that this is a poem primarily a descriptive poem, or an instructive poem? What is the poet's attitude toward the subject?
 (*This poem is more of an instructive or political poem. The poet is against whaling.*)
4. Find examples of repetition in this poem. What affect do they have?
 (*"It is not about" is repeated throughout the poem. This emphasizes the words which follow, and creates the feeling of an incantation.*)

Teacher Information

Part Four

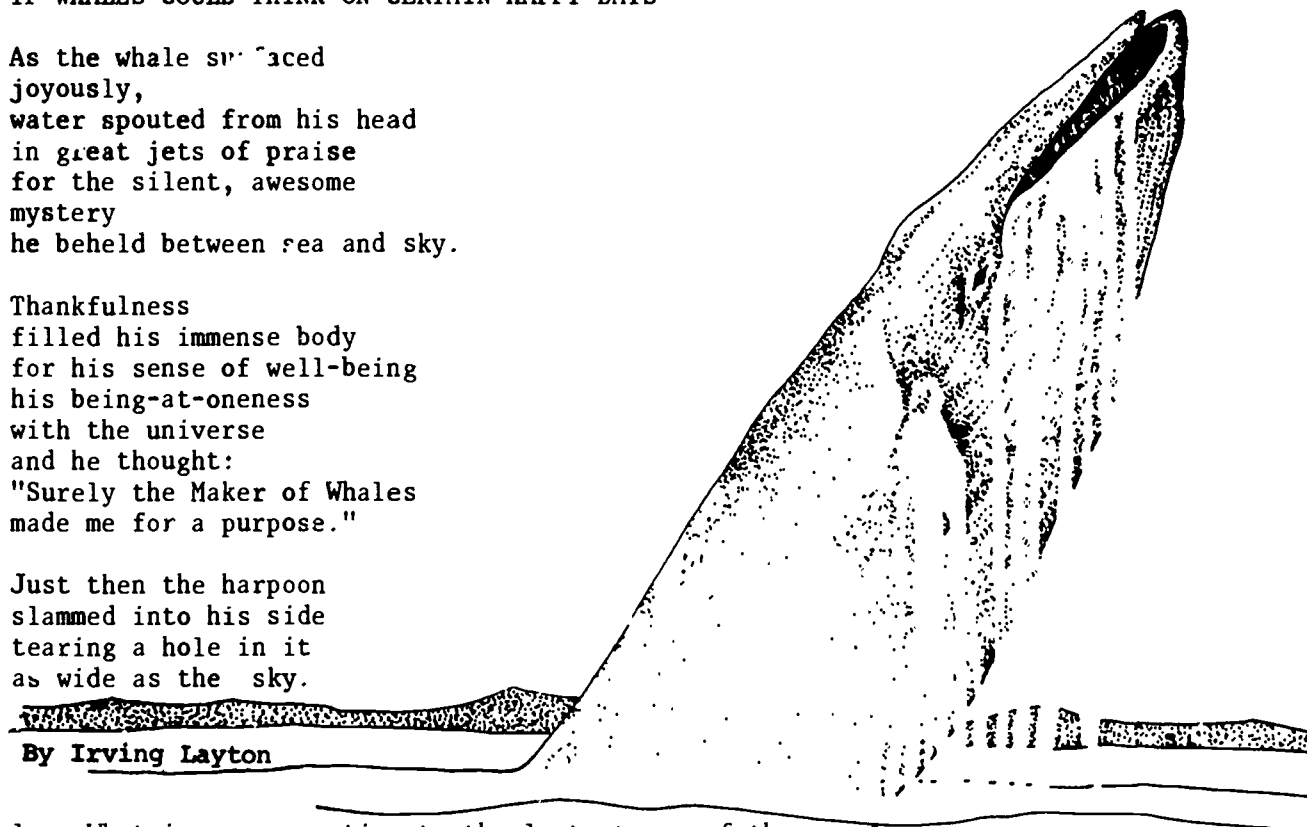
IF WHALES COULD THINK ON CERTAIN HAPPY DAYS

As the whale surfaced
joyously,
water spouted from his head
in great jets of praise
for the silent, awesome
mystery
he beheld between sea and sky.

Thankfulness
filled his immense body
for his sense of well-being
his being-at-oneness
with the universe
and he thought:
"Surely the Maker of Whales
made me for a purpose."

Just then the harpoon
slammed into his side
tearing a hole in it
as wide as the sky.

By Irving Layton



1. What is your reaction to the last stanza of the poem?

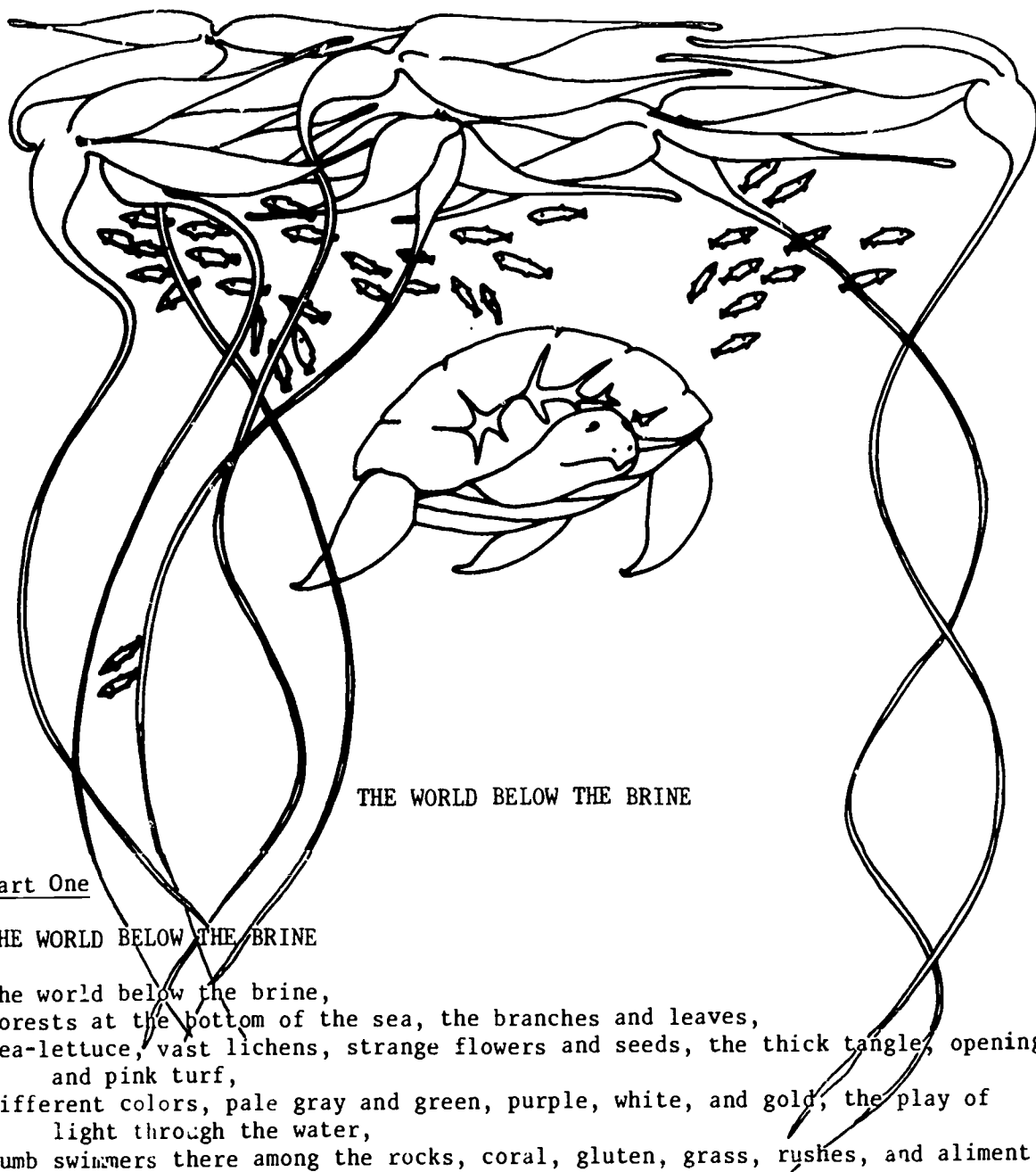
(Answers will vary.)

2. What is the effect of having the whale speak?

(It makes the whale appear more human, intelligent and thus arouses more sympathy and identification on the part of the reader.)

3. Compare the last two poems on whales. What are the two poets' attitudes on whales and whaling? How are the moods of the poems similar or different? How is irony used in the two poems?

(Both poets see whales as a wonderful creature and oppose whaling. However, the poem by Layton has a much lighter feeling. Both poems' titles are ironic.)



THE WORLD BELOW THE BRINE

Part One

THE WORLD BELOW THE BRINE

The world below the brine,
 Forests at the bottom of the sea, the branches and leaves,
 Sea-lettuce, vast lichens, strange flowers and seeds, the thick tangle, openings,
 and pink turf,
 Different colors, pale gray and green, purple, white, and gold, the play of
 light through the water,
 Dumb swimmers there among the rocks, coral, gluten, grass, rushes, and aliment
 of the swimmers,
 Sluggish existences grazing there suspended, or slowly crawling close to the
 bottom,
 The sperm whale at the surface blowing air and spray, or disporting with his
 flukes,
 The leaden-eyed shark, the walrus, the turtle, the hair sea-leopard, and the
 sting-ray,
 Passions there, wars, pursuits, tribes, sight in those ocean-depths, breathing
 that thick-breathing air, as so many do,
 The change thence to the sight here, and to the subtle air breathed by beings
 like us who walk this sphere,
 The change onward from ours to that of beings who walk other spheres.

By Walt Whitman

NAME _____

1. What elements do you see that distinguish this free verse selection as poetry?
2. This poem was written in the late 1800's. Can you see a new or different interpretation of "forests at the bottom of the sea?"
3. How does this poet teach you about the world below the brine?

Part Two

NAME _____

OUTER SPACE, INNER SPACE

Expecting no miracles, we walked
 beside the water, resting in
 ourselves and a vacant stretch
 of sand along Puget Sound.
 At the edge of a tide pool a green
 iridescent worm wound
 in slow grace its segmented
 length over fields of black
 cobblestone dollars, crabs, both
 purple and brown, blue
 mussels, snails, kelp
 in ribbons of red and green.
 You walked ahead while I,
 sprawled on a tangle of wood,
 feeling heavy and loose, ripe
 as a vegetable among club fern,
 dandelions, broom, and wild roses,
 looked back where our footsteps went
 in pairs, two lines parallel.

A gull, screeching like iron
 in an old hoist, patrolled
 where you stood and waited for me.
 You had found a nest, pink
 with trembling baby shrimp.
 We watched them tuck and burrow.
 With care, you lifted their rock,
 swaddled in kelp and venerable
 in studded barnacles
 and placed it as you'd found it.
 We saw the urchin stars
 that ringed its base unfold
 and take their colors.

Night came with a deeper gray
 and settled in, turning
 the clam shells white as thoughts.
 Pointing to the pale shell
 of moon you said, "Those three
 are on their way home now, "
 and I pointed to Venus,

Remembering how it was
 watching the hump-back shrimp
 wiggling in unaccustomed light,
 each carapace pink and delicate,
 almost transparent. I dreamt of hands
 swimming in new air
 before eyes that take their color
 from the slate-blue shades of the sea.

NAME _____

Heading back, we saw our tracks,
in two lines, parallel.
They stretched until they seemed
to converge where we began.

Gladys Cardiff

1. Find examples of simile.
2. This poem describes many different aspects of the marine environment. Which images most appealed to you?
3. Compare this poem to "World Below the Brine." Consider both style and content.
4. Reread the last two stanzas. What do they suggest to you? How do they relate to the rest of the poem, and how are they set apart?

Part Three

THIS POEM IS NOT ABOUT WHALES

it is not about the carve
and slash of knives
it is not a lament
for ruthless bastards
thinking profit and blubber
in the same fat breath
it is not a digression
on slabs of flesh
computed in clicking brains
coming up crisp green
and competitive
nor is it about guts and entrails
sprawling across snowscapes
not about crimson rorschach shapes
in virgin white
not about the madness
of slip and sever
not about whales
not about whales

By Judith Fitzgerald, who is a Canadian

1. What is the mood of the poet in writing this poem? Point out specific words or lines to substantiate your answer.
2. Using the information from "Cetaceans," what are the facts about whales and whaling contained in this poem?
3. Would you say that this is a poem primarily a descriptive poem, or an instructive poem? What is the poet's attitude toward the subject?
4. Find examples of repetition in this poem. What affect do they have?

Part Four

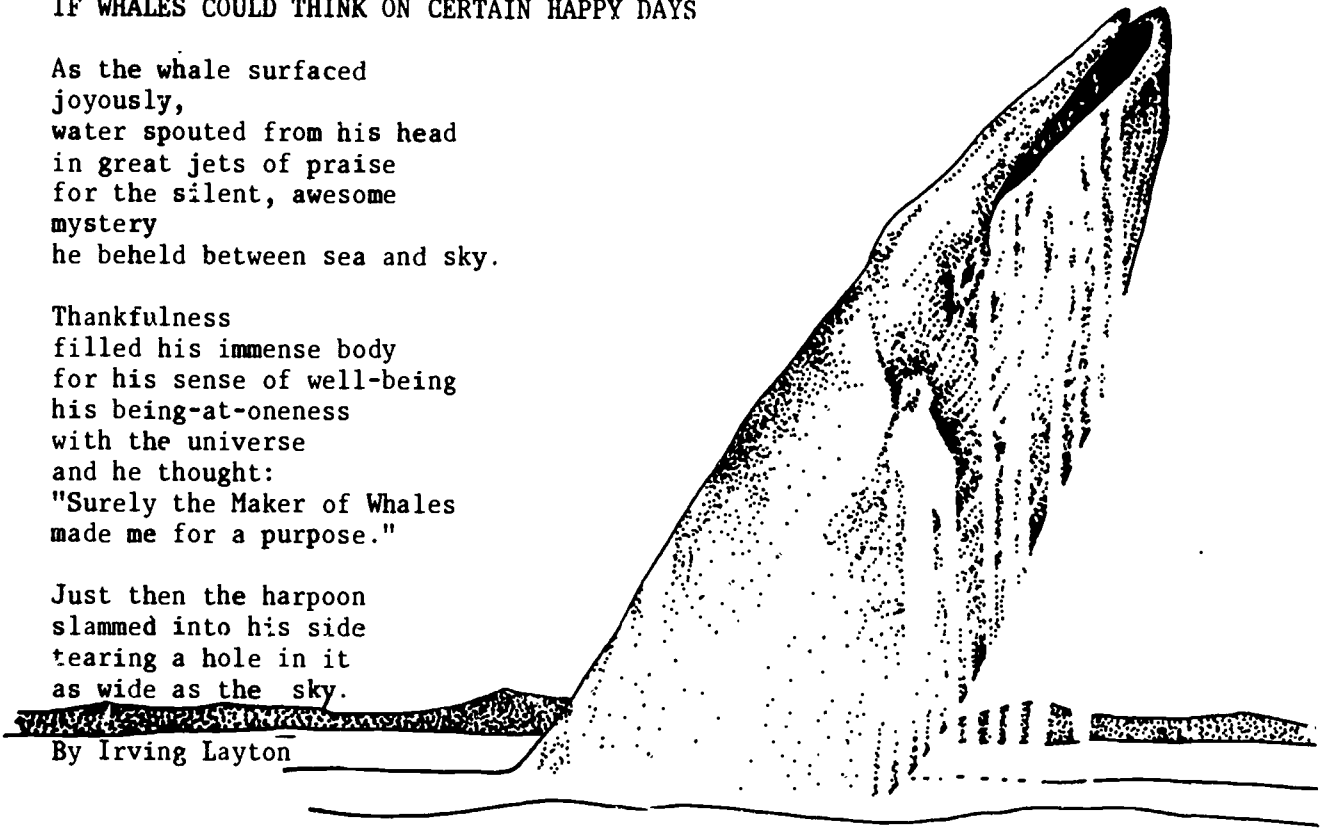
IF WHALES COULD THINK ON CERTAIN HAPPY DAYS

As the whale surfaced
joyously,
water spouted from his head
in great jets of praise
for the silent, awesome
mystery
he beheld between sea and sky.

Thankfulness
filled his immense body
for his sense of well-being
his being-at-oneness
with the universe
and he thought:
"Surely the Maker of Whales
made me for a purpose."

Just then the harpoon
slammed into his side
tearing a hole in it
as wide as the sky.

By Irving Layton



1. What is your reaction to the last stanza of the poem?
2. What is the effect of having the whale speak?
3. Compare the last two poems on whales. What are the two poets' attitudes on whales and whaling? How are the moods of the poems similar or different? How is irony used in the two poems?

NAME _____

CETACEANS

The group of animals to which the whales belong is known as the Cetacea and includes a large number of species ranging in size from the four-foot-long common porpoise to the enormous blue whale, which may reach a length of 120 feet. All share a number of important features. They are all legless, streamlined aquatic animals, swimming by means of boneless, horizontally set tail flukes. All are warm blooded and give birth to well-developed live young, which are carefully tended and suckled by the females. They are hairless except for a few bristles around the snout, but are well insulated against the cold of their aquatic environment by a thick layer of blubber lying immediately below the skin. This layer of oil-rich blubber--up to ten inches thick in some of the larger whales--covers the entire body but for the flippers, fin and tail flukes, and was the prime reason for their decimation by the profit-hungry whaling fleets of the world. The whale's vulnerability to the whaler's harpoon gun is also increased by its dependence, like all mammals, on air. All whales breathe at the surface, through nostrils situated on the top of the head, and the characteristic cloud of vapor from whale's exhaled breath gives the animal little chance of escaping detection.

There is no doubt that the ancient ancestors of today's whales were land animals. However, the group must have taken to the water by the beginning of the Tertiary era, some 65 million years ago, for their physical adaptations to the marine environment are now so complete that they cannot survive out of the water. The members of the Cetacea fall naturally into two major subdivisions--the toothed whales, called scientifically the Odontoceti, and the whalebone whales, the Mysticeti. The Odontoceti is by far the most abundant group and contains all the small species, the dolphins and porpoises, and a number of the larger forms, including the killer whale and, largest of the Odontocetes, the sperm whale, which may attain a length of 60 feet. As their name implies, these species have teeth, but, unlike the teeth of most mammals, which are few in number and vary in shape according to their location in the mouth, whale teeth are invariably conical. Some species have very few teeth, but dolphins have up to two hundred, making their elongated jaws exceptionally efficient fish-catching devices. All toothed whales feed on moderate-to large-sized prey, chiefly fish and squid, and the titanic struggles which take place in the ocean depths are borne out by the remains of the giant squid found in the stomachs of dead sperm whales and the deep scars left in the whales' skin by the squid's clawed suckers.

The second group, though smaller in number of species, contains the largest animals living today. Even the smallest member, the pigmy right whale, is 15 feet in length, while the blue whale is the largest animal ever to have lived on earth. These giant animals all feed on planktonic shrimps, or krill, which they strain from the water. The Mysticeti are all totally toothless, but hanging from the roof of the mouth they have a row of triangular plates of baleen--a horny material--finely fringed on the inner edge. The polar waters in which these baleen whales feed are rich in plankton and the whale feeds by swimming through a dense shoal of the tiny organisms with its mouth open. Closing the enormous gape, the whale then raises its tongue, forcing the food-laden water through the filtering curtain of the plates. Water is expelled through the sides of the mouth, leaving a mass of organic food on the inner surface of the plates. Each mouthful may yield no more than a few pounds of krill, but a large whale may gather two tons in a single day.

It is a sad reflection on man's integrity that despite the wealth of information now available on the biology of whales, their breeding behavior, population densities and their role in the marine ecosystem, whaling still continues--and to the extent that several species are now so reduced in numbers that their very survival is in danger. Very few whale products are without viable alternatives and yet the pelagic industries continue to operate in the face of growing world opinion in favor of strict controls on whaling. The arguments for conservation of whale stocks are overwhelming. If action is not taken, the loss of these animals may have disastrous long-term repercussions on the balance of the marine food web; a group of remarkable creatures may be lost for all time, and--perhaps more selfish and yet potentially just as important--man may lose forever a food resource which, if harvested carefully, could provide a future hungry world with an estimated sustainable yield of about two million tons of protein annually.

From The Rand McNally Atlas of the Oceans (New York: Rand McNally and Company, 1977), p. 72.

KILLER WHALE
(Orcinus orca)

Below is a description of the Killer Whale, one of the types of whales found in Puget Sound. Use the description below to express in a poem either the information provided, a feeling about, or an attitude toward the information.

Description

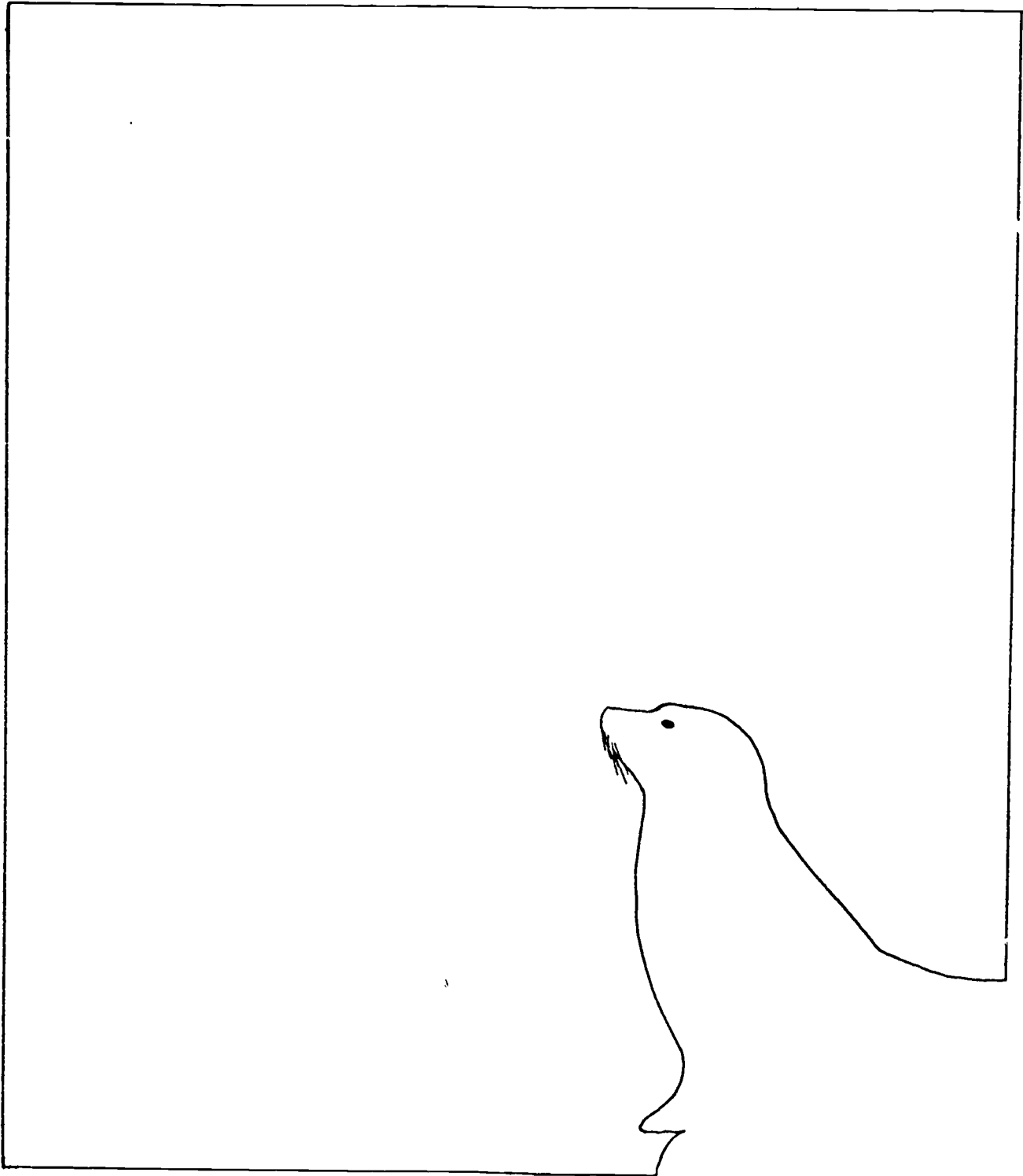
"Males up to thirty-one feet in length with immense triangular-shaped dorsal fins three to six feet high; weight two to four tons; females up to twenty-one feet long, weight 1,500-2,500 pounds, dorsal fins up to two feet tall, curved backward on front edge. The colors are most striking, black or blackish above, white to yellowish below, but also with white pattern extending up side and a large white oval spot above eye. A grayish area seen behind the dorsal fin on the back. The high dorsal fins of the males sometimes have their tops flop over because there is not bone in fin. Snout is blunt with distinct short beak. Ten to fourteen sharp teeth in each jaw, interlocking when brought together by mouth shutting, producing an efficient trap for animal food."

Habits

"A very efficient swimming machine with speed up to and perhaps past thirty miles an hour. Hunts food mainly in packs of three to thirty or more, like wolf packs with a leader, even ganging up on large whales and trying to bite their tongues, flippers and other delicate or vulnerable parts, but more likely to attack isolated, sick, wounded or young animals. Main food, however, is seals, squid, dolphins and other smaller whales. Sometimes catches fish but prefers warm-blooded animals. Extremely few recorded attacks on people. Most food is swallowed whole or in large chunks."

From: Brown, Vinson. Sea Mammals and Reptiles of the Pacific Coast,
Collier Books. Collier MacMillan Publishes. New York, NY 1976.





**ACTIVITY 5:
PACIFIC NORTHWEST POETS AND
THE SEA (2 DAYS)**

ACTIVITY 5: PACIFIC NORTHWEST POETS AND THE SEA (2 DAYS)

- CONCEPTS:**
1. The waters of the Pacific Northwest have inspired local poets to express their response to the sea.
 2. Some Pacific Northwest poets who have written about the sea or local waters are Nelson Bentley, Theodore Roethke, David Wagoner, James Mitsui, and Gladys Cardiff.
- OBJECTIVES:**
- In the course of this activity, students will:
1. learn the location of sites mentioned in the poems.
 2. discern the moods the sites evoke in the poets.
 3. use the skills gained from previous activities to discuss the poems.
- TEACHER PREPARATION:**
1. Read all seven parts of student activity, "Pacific Northwest Poets and the Sea."
- MATERIALS:**
1. Class set of student activity 5, Parts 1 through 7.
 2. Class set of student handout, "Reading Poetry: Some Things to Consider."
 3. Map of Washington state
- PROCEDURES:**
1. Ask students to name local waters with which they are familiar and share experiences at those sites.
 2. What are issues that might interest Pacific Northwest poets? Using your Washington maps, what area might attract poetic interest?
 3. Distribute parts 1-3 of Student Activity 5. Have students read each poem and discuss the questions at the end.
 4. Distribute student handout, "Reading Poetry: Some Things to Consider" and parts 4-7 of Activity 5. Allow students time to read the handout and read the poems (at least overnight) in order to formulate their thoughts about the poem. You may wish to divide the class into small groups and assign one poem per group. Have students lead the discussion about the poems and what they discovered in them.
- EXTENDED ACTIVITIES:**
1. The English Department at the University of Washington regularly holds evening poetry readings. Local poets read their poems, and then the poems are discussed. Usually written information is available. This would be an informal and fun way for your students to interact with and learn from local poets. Call 543-2690 for weekly schedules of poetry readings.
 2. Show film "Sudden Rain" (25 minutes, color--from Seattle Public Library), which features Seattle poet Jan Tisot reading his poetry at different locations in Seattle.

3. Show film, "In a Dark Time" (30 min, black & white). This film can be rented from the film library at the University of Washington for \$9.00. It is a film of Pulitzer Prizewinner poet and former University of Washington Professor, Theodore Roethke, reading his poems.
4. Locate a local ocean fisherman. Ask him/her to address your class on the hardships and rewards of his/her work and experiences on the sea. Have the students try to put this information into poetry form.
5. Have students research the different types of commercial fishing in this area, techniques used, the types of boats used, and the advantages/disadvantages of each method. Contact the Pacific Science Center, Marine Education Project for the available slide show on commercial fishing.

Teacher Information

Part One

WASHINGTON COAST

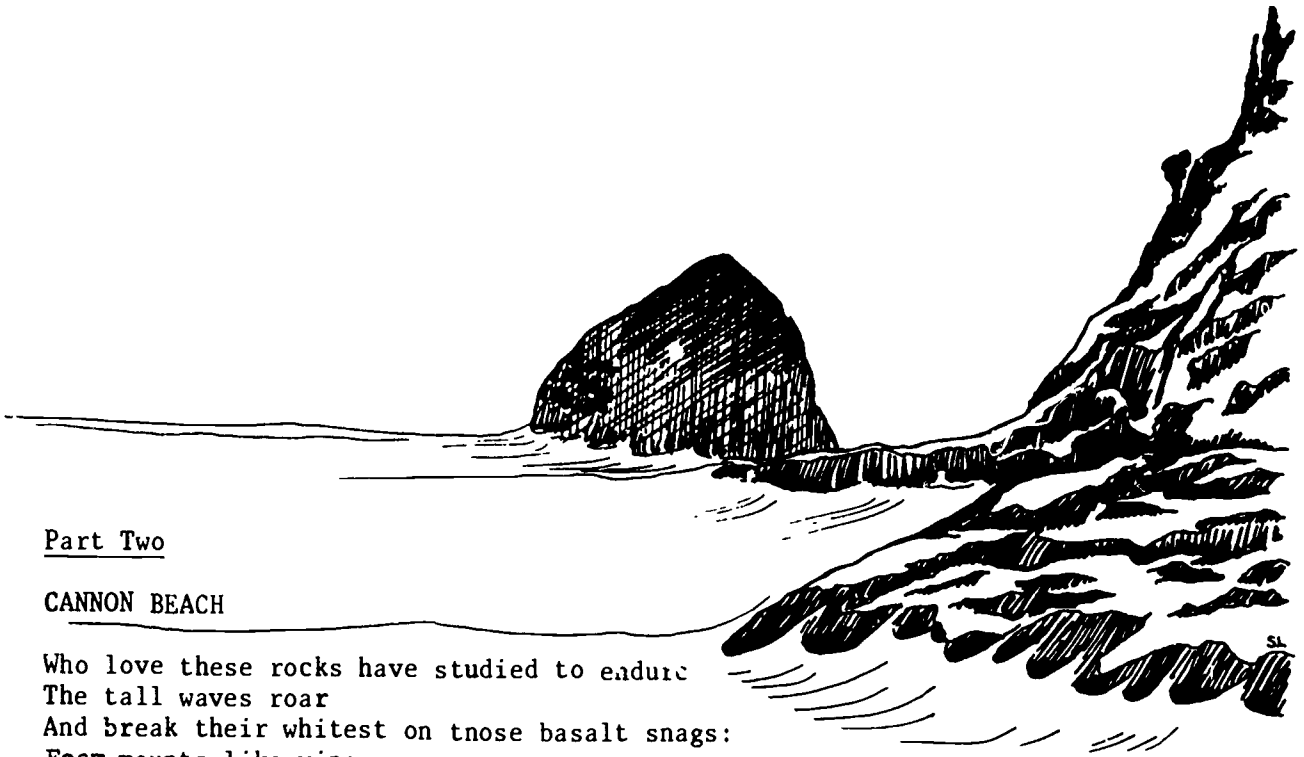
I stand on shards of clam while Shawn
 Filling his circus pail with sand
 Kneels in the shelter of a dune:
 Gentle as a rose his hand
 Scoops and lifts the fluted shell.
 A monotone lives in the sedge,
 A mile from any daffodil.
 Beth, far down the ocean edge,
 Hunts agates, imaged in the glaze:
 Charms from underneath the tide.
 Love impels me to compose.
 Gulls knit the waves' infinitude.
 Though I have shot no living thing
 A hunting cap keeps warm my ears,
 An ocean in the spiralling:
 I aim a pencil down the years.

By Nelson Bentley

Shawn--the poet's son

Beth--the poet's wife

1. While his son is filling a pail with sand, and his wife is hunting agates, what is the poet doing at the beach? What inspired him to this activity. (*The poet is writing ("I aim a pencil down the years") Answers will vary as to what inspires him; love, the total environment of the coast, etc.*)
2. Is the poet saying something about the ocean? Or is he using the ocean as a backdrop for a different statement? (*Answers will vary*)
3. Find the half rhymes used in the poem. (Also, notice the rhymed couplet at the end of the poem. This is often used in poetry, even in free verse.) (*shell, daffodil: tide, infinitude*)



Part Two

CANNON BEACH

Who love these rocks have studied to endure
 The tall waves roar
 And break their whitest on those basalt snags:
 Foam mounts like wings
 Out of a sound unchanged since Genesis.

The ocean heaves the weight of time ashore:
 The rocks stand sheer.
 White seafowl slowly skim immobile nests.
 Fish blue with warts,
 Eyes glazed by water, swim under the blue surface.

Where one black monolith makes immortal thrust
 And waves smash most,
 Light like a halo holds the primitive tip.
 From cape to cape
 That rigid word orders the surge of chaos.

By Nelson Bentley

Cannon Beach, on the Oregon Coast, was named from the cannon from the sloop Shark, shipwrecked in 1846. It is the westernmost point of the Lewis and Clark Trail.

Teacher Information

1. To what is Genesis a reference?
(It is a reference to the biblical description of the creation of earth/people.)
2. What is the mood of the ocean at Cannon Beach? What in the poem creates that mood?
(It is powerful and untamed. Words include roar, heaves, immortal thrust, etc.)
3. Find examples of personification and simile.
*(Personification: waves roar; ocean heaves the weight, monolith makes immortal thrust, rigid word orders.
Simile: Foam mounts like wings; Light like a halo.)*
4. What are some of the ideas you hear expressed in this poem?

(Answers will vary. Encourage students to freely generate ideas or impressions and then to more carefully examine the thoughts expressed and develop those.)

Teacher Information

Part Three

MEDITATION AT OYSTER RIVER

1

Over the low, barnacled, elephant-colored rocks,
 Come the first tide-ripples, moving, almost without sound, toward me,
 Running along the narrow furrows of the shore, the rows of dead clam shells;
 Then a runnel behind me, creeping closer,
 Alive with tiny striped fish, and young crabs climbing in and out of the water.

No sound from the bay. No violence.
 Even the gulls quiet on the far rocks,
 Silent, in the deepening light,
 Their cat-mewing over,
 Their child-whimpering.

At last one long undulant ripple,
 Blue-black from where I am sitting,
 Makes almost a wave over a barrier of small stones,
 Slapping lightly against a sunken log.
 I dabble my toes in the brackish foam sliding forward,
 Then retire to a rock higher up on the cliff-side.
 The wind slackens, light as a moth fanning a stone:
 A fish raven turns on its perch (a dead tree in the rivermouth),
 Its wings catching a last glint of the reflected sunlight.

By Theodore Roethlis

1. Select a couple of images and illuminate them. What is their effect on the poem?
(Answers will vary)
2. How does the rhythm change in the second stanza? How does this change your sense of what's happening? *(In the first stanza, the rhythm is more flowing and it is one long sentence. In the second, the phrases are shorter and the pauses created by the punctuations depicts the silence the words describe.)*
3. There are a number of sounds repeated in line 3. How does the repetition match the sense of what's being described?
(The line is describing water moving, and the quickly moving rhythm of the line, enhanced by the repetition of the sounds, aurally depicts this movement.)

This is only the first of four parts of this poem. The poem is a "meditation" and not just a description of a place. Read parts 2-4 of "Meditation at Oyster River" and discuss how the focus of the poem changes.

2

The self persists like a dying star,
 In sleep, afraid. Death's face rises afresh,
 Among the shy beasts, the deer at the salt-lick,
 The doe with its sloped shoulders loping across the highway,
 The young snake, poised in green leaves, waiting for its fly,
 The hummingbird, whirring from quince-blossom to morning-glory --
 With these I would be.

And with water: the waves coming forward, without cessation,
 The waves, altered by sand-bars, beds of kelp, miscellaneous driftwood,
 Topped by cross-winds, tugged at by sinuous undercurrents
 The tide rustling in, sliding between the ridges of stone,
 The tongues of water, creeping in, quietly.

3

In this hour,
 In this first heaven of knowing,
 The flesh takes on the pure poise of the spirit,
 Acquires, for a time, the sandpiper's insouciance,
 The hummingbird's surety, the kingfisher's cunning --
 I shift on my rock, and I think:
 Of the first trembling of a Michigan brook in April,
 Over a lip of stone, the tiny rivulet;
 And that wrist-thick cascade tumbling from a cleft rock,
 Its spray holding a double rain-bow in early morning,
 Small enough to be taken in, embraced, by two arms, --
 Or the Tittewabawasee, in the time between winter and spring,
 When the ice melts along the edges in early afternoon.
 And the midchannel begins cracking and heaving from the pressure beneath,
 The ice piling high against the iron-bound spiles,
 Gleaming, freezing hard again, creaking at midnight --
 And I long for the blast of dynamite,
 The sudden sucking roar as the culvert loosens its debris of branches and sticks,
 Welter of tin cans, pails, old bird nests, a child's shoe riding a log,
 As the piled ice breaks away from the battered spiles,
 And the whole river begins to move forward, its bridges shaking.

4

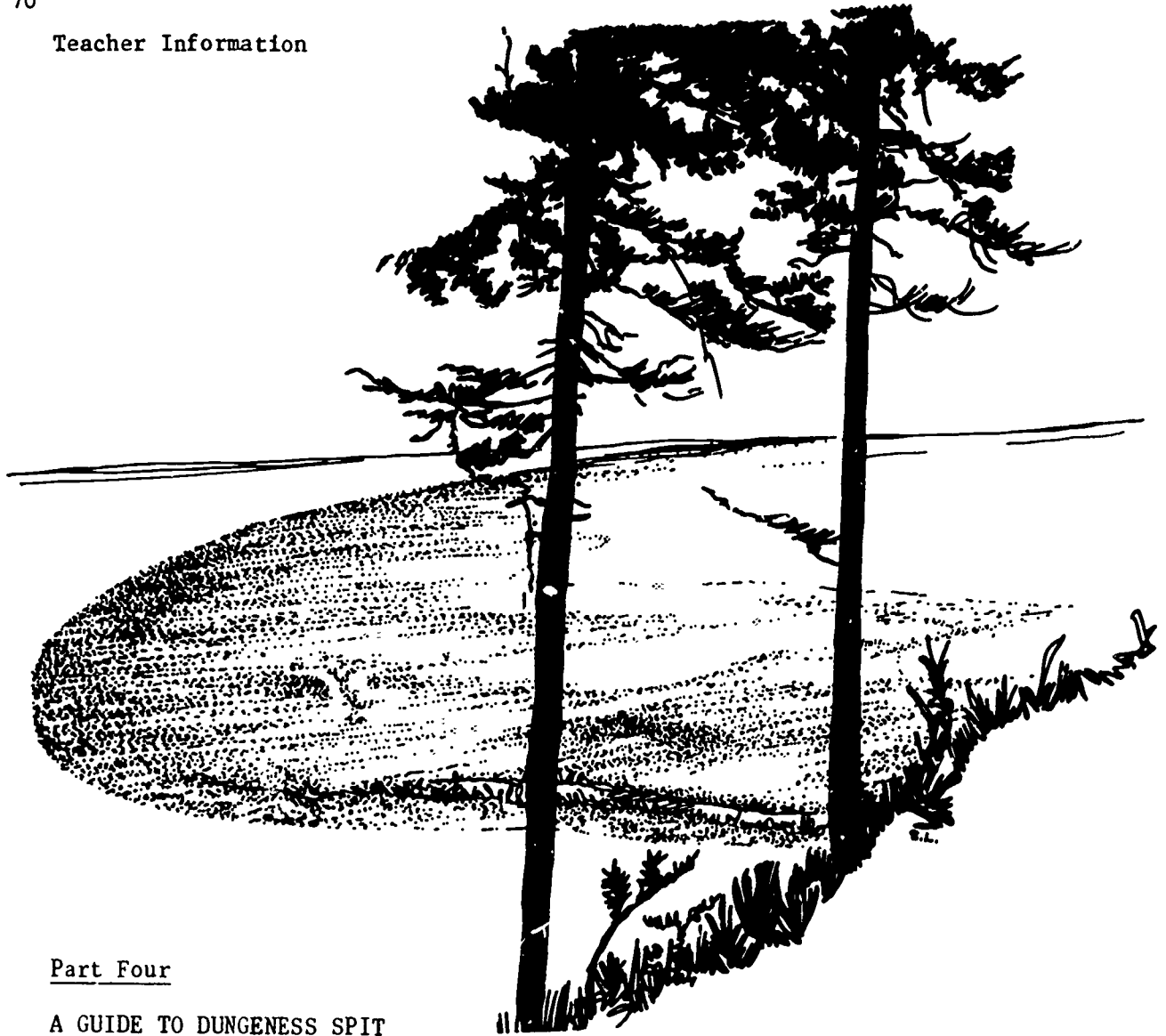
Now, in this waning of light, I rock with the motion of morning;
 In the cradle of all that is,
 I'm lulled into half-sleep
 By the lapping of water,
 Cries of the sandpiper.
 Water's my will, and my way.

POETRY: SOME THINGS TO CONSIDER

Now that you've read and discussed several poems and hopefully are more familiar with the art of poetry, these last four poems are for you to read and explore without the usual discussion questions to guide you. As a review and summary, the following is a general list of questions to help enhance your experience of the poem. But again, keep in mind that poetry is to be enjoyed. Use your imagination and senses to explore the richness of the poems.

1. What strikes you about the poem? Are there particular images or sounds that caught your attention?
2. How does the poem sound? Does the poet use assonance or alliteration? Where? What affect does this have. Does the poem sound harsh or soft?
3. What is the rhythm of the poem? Does it change? What affect does this have on the sense of the poem?
4. Does the poet use repetition? What is the affect of this?
5. What is the mood of the poem? What helps create the mood - e.g. certain words, the rhythm, images, etc.
6. Did the poet use rhyme--either half or end rhyme? Did the poet use metaphor, simile, personification, onomatopoeia? What affect do they have on the sense of the poem? On the sensuality of the poem?
7. What images are used in the poem? What kind of words/sounds does the poet use to create those images? How do the images enhance the poem?
8. What is the purpose of the poem? Is it to tell a story, describe something, express an emotion, teach a lesson . . . ?
9. What is the poet's attitude toward the subject? How do you know?

Teacher Information

Part Four

A GUIDE TO DUNGENESS SPIT

Out of wild roses down from the switching road between pools
 We step to an arm of land washed from the sea.
 On the windward shore
 The combers come from the strait, from narrows and shoals
 Far below sight. To leeward, floating on trees
 In a blue cove, the cormorants
 Stretch to a point above us, their wings held out like skysails.
 Where shall we walk? First, put your prints to the sea,
 Fill them, and pause there:
 Seven miles to the lighthouse, curved yellow-and-grey-miles
 Tossed among kelp, abandoned with bleaching rooftrees,
 Past reaches and currents;
 And we must go afoot at a time when the tide is heeling.
 Those whistling overhead are Canada geese;
 Some on the waves are loons,
 And more on the sand are pipers. There, Bonaparte's gulls
 Settle a single perch. Those are sponges.
 Those are the ends of bones.

Teacher Information

If we cross to the inner shore, the grebes and goldeneyes
 Rear themselves and plunge through the still surface,
 Fishing below the dunes
 And rising alarmed, higher than waves. Those are cockleshells.
 And these are the dead. I said we would come to these.
 Stoop to the stones.
 Overturn one: the grey-and-white, inch-long crabs come pulsing
 And clambering from their hollows, tiptoeing sideways.
 They lift their pincers
 To defend the dark. Let us step this way. Follow me closely
 Past snowy plovers bustling among sand-fleas.
 The air grows dense.
 You must decide now whether we shall walk for miles and miles
 And whether all birds are the young of other creatures
 Or their own young ones,
 Or simply their old selves because they die. One falls,
 And the others touch him webfoot or with claws,
 Treading him for the ocean.
 This is called sanctuary. Those are feathers and scales.
 We both go into mist, and it hooks behind us.
 Those are foghorns.
 Wait, and the bird on the high rock is a snowy owl.
 Facing the sea. Its flashing yellow eyes
 Turn past us and return;
 And turning from the calm shore to the breakers, utterly still,
 They lead us by the bay and through the shallows,
 Buoy us into the wind.
 Those are tears. Those are called houses, and those are people.
 Here is a stairway past the whites of our eyes.
 All our distance
 Has ended in the light. We climb to the light in spirals,
 And look, between us we have come all the way,

 And it never ends
 In the ocean, the spit and image of our guided travels.
 Those are called ships. We are called lovers.
 There lie the mountains.

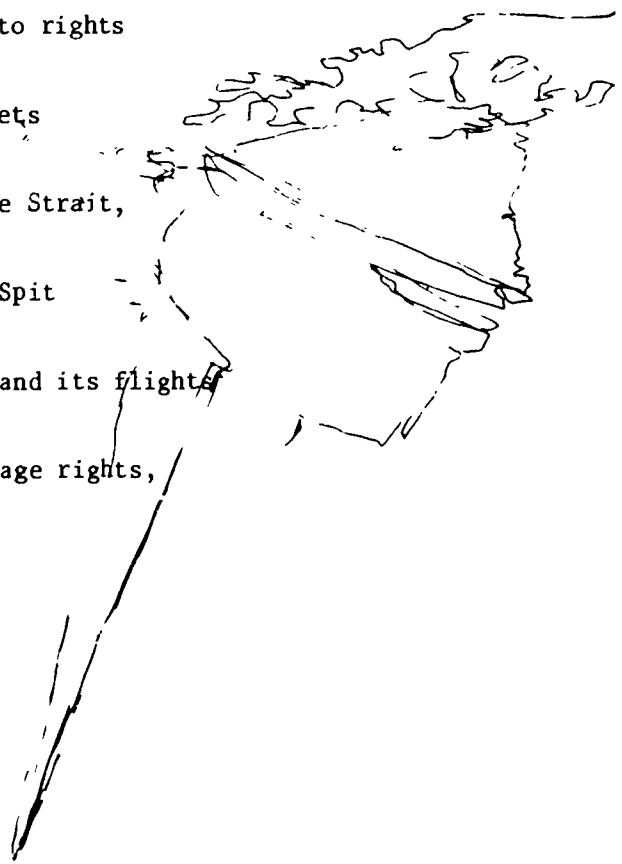
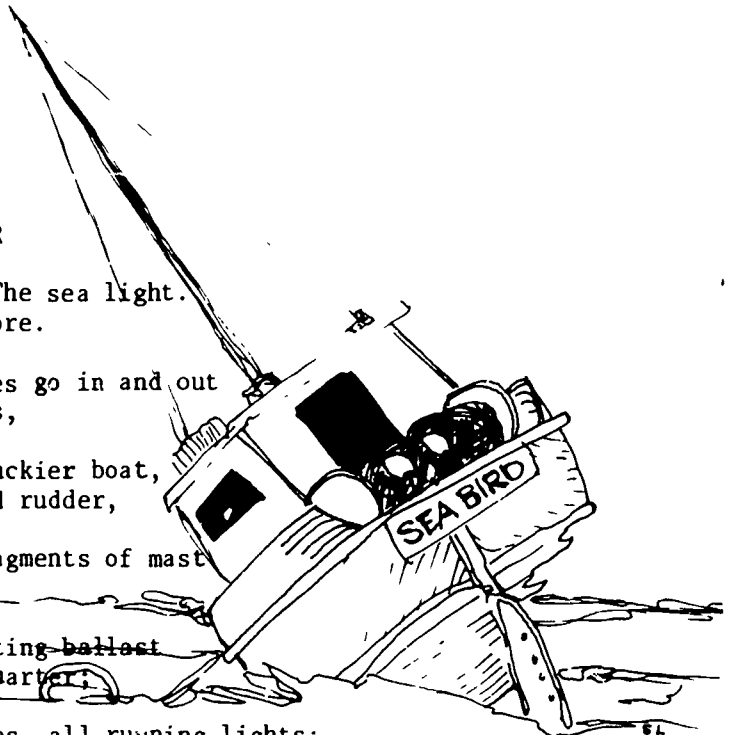
by David Wagoner

Teacher Information

Part FiveTO THE MASTER OF SEA BIRD OF FRIDAY HARBOR

Wind north-by-east at noon. Sky heavy. The sea light.
 Your fishing boat lies portside on the shore.
 Through a six-foot hole in the hull
 Waves touch and go. Wrack whitens. Eddies go in and out
 Among the broken ribs where gravel gathers,
 Knocking high as the keel.
 If you survived the night, sir, in some luckier boat,
 You have lost, in a single blow, motor and rudder,
 Binnacle and wheel;
 Now held at length by a tangled cable, fragments of mast
 Are bobbing away. The chain and anchor
 Must have gone down as well.
 Here in the hulk, the cabin above my shifting ballast
 Has listed ninety degrees to a sleeping quarter;
 You have lost the fantail
 And bowspirt, most of the starboard strakes, all running lights;
 Your sea-blue dungarees lie soaking there
 Half under sand
 And salted down like fish. The fish caught dead to rights
 And held in the hold have broken out of the air
 To swim back where you found them
 Or to float off as freely as other jetsam. The nets
 Have settled down to hold themselves in place.
 And if you drowned
 In the heaving, heavy slopes, the grey rags of the Strait,
 Remember the rules. No passage is endless.
 Over rocks, even islands,
 The boat came pounding thirty miles to Dungeness Spit
 Without your help, throwing away the compass,
 Dowsing its lights in the wind,
 And tossing its name to pieces. Between the sea and its flight
 Against the shore, like fish or men out of water,
 Birds on the ground
 Will be picked clean for a time. By ancient salvage rights,
 I claim this poem from Sea Bird of Friday Harbor,
 Someday to be returned.

By David Wagoner



Part Six

NEAR CHILEAN MEMORIAL

You could skip every rock on this beach.
Looking for the change in each one
takes all I want to do. You carve
a cedar stick with your knife
sharpened by spittle and two stones.
I see so many curved wings, enough crows
for each day of the week. The stack
we scaled this morning for more vision
has become an island. A branch
has rolled off the fire; only a root
burns to be what it can.

You climb a headland to take a last picture
of the falling sun. A seal floats in close
to check our fire. Up the coast a few miles,
men are buried in their ship's mainsail.
Down the beach toward home all I see
is campfire reflecting off the faces
of an older couple. In the morning
they will wave and hike on.

It's nearly high tide; surf washes gravel
sixty feet away. These logs I'm against
have no bark. It has taken until now
to see more than one star. Out of the dark
you tell me, red sky at night
sailor's delight and point due West.

Coming off the beach at Rialto tomorrow
asphalt will feel awkward. We will look
across the Quillayute at the houses in LaPush
and stand twelve road miles away.
It's easier to look at the moon.
I could stay a long time here.
Stalk with the Great Blue Heron
who refuses to fly from this unnamed cove.

James Mitsui

Teacher Information

Part Seven

SWINOMISH CHANNEL

Goat Island is the knot
 tying off Skagit Bay
 where Swinomish threads Hole in the Wall.
 Pleats hiss off the bow,
 fold and unfold between high rock.
 the engine sings in unison
 with its shadow.
 Curve and color, the sand bar is
 stretched deer hide, is
 a drum decorated with shields.
 A pair of cormorants stretch and beat wet wings.
 Selvage of grass and sea grapes
 hems the open bolts of farmland.
 Above, a golden eagle circles,
 closes tight as a button,
 his talons stitch a mound of feathers.
 Whumf, whumf,
 the rickety LaConnor docks hum
 like an old Singer, treadle back and forth
 rocked by our wake.
 Bowpickers and gillnetters lend line and spindle.
 Following the deepest cut we patch the channel markers
 into a comforter of orange arrows.
 To the port, a skunk picks out the seams of picnic litter;
 starboard, brown-eyed children embroider marsh grass
 with yellow and red.
 We pass beneath two bridges fastened like clasps.
 Land falls back.
 The engine sings solo.
 My shoulders are cold.
 I wish I could keep the channel
 like a fabulous shawl around me.

Gladys Cardiff

Part One

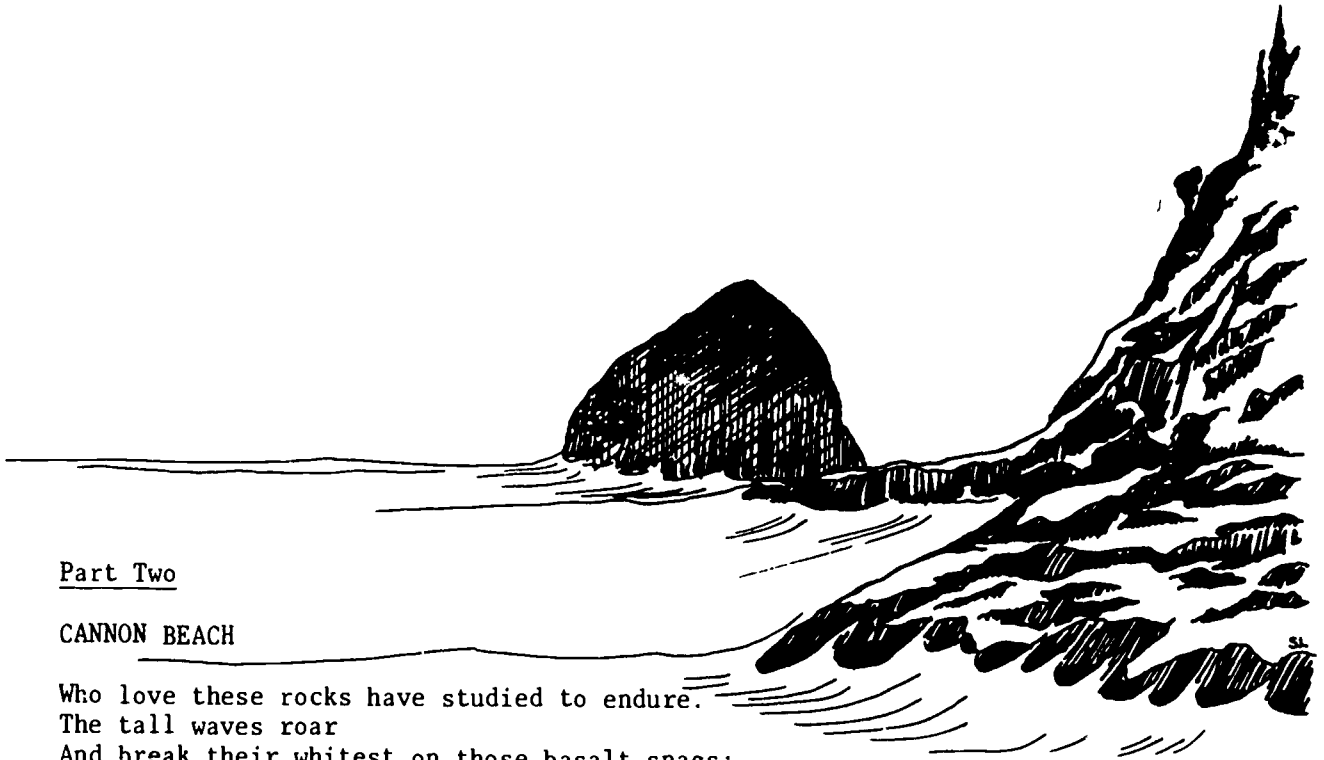
WASHINGTON COAST

I stand on shards of clam while Shawn
Filling his circus pail with sand
Kneels in the shelter of a dune:
Gentle as a rose his hand
Scoops and lifts the fluted shell.
A monotone lives in the sedge,
A mile from any daffodil.
Beth, far down the ocean edge,
Hunts agates, imaged in the glaze:
Charms from underneath the tide.
Love impels me to compose.
Gulls knit the waves' infinitude.
Though I have shot no living thing
A hunting cap keeps warm my ears,
An ocean in the spiralling:
I aim a pencil down the years.

By Nelson Bentley

Shawn--the poet's son
Beth--the poet's wife

1. While his son is filling a pail with sand, and his wife is hunting agates, what is the poet doing at the beach? What inspired him to this activity.
2. Is the poet saying something about the ocean? Or is he using the ocean as a backdrop for a different statement?
3. Find the half rhymes used in the poem. (Also, notice the rhymed couplet at the end of the poem. This is often used in poetry, even in free verse.)



Part Two

CANNON BEACH

Who love these rocks have studied to endure.
 The tall waves roar
 And break their whitest on those basalt snags:
 Foam mounts like wings
 Out of a sound unchanged since Genesis

The ocean heaves the weight of time ashore:
 The rocks stand sheer.
 White seafowl slowly skim immobile nests.
 Fish blue with warts,
 Eyes glazed by water, swim under the blue surface.

Where one black monolith makes immortal thrust
 And waves smash most,
 Light like a halo holds the primitive tip.
 From cape to cape
 That rigid word orders the surge of chaos.

By Nelson Bentley

Cannon Beach, on the Oregon Coast, was named from the cannon from the sloop Shark, shipwrecked in 1846. It is the westernmost point of the Lewis and Clark Trail.

NAME _____

1. To what is Genesis a reference?
2. What is the mood of the ocean at Cannon Beach? What in the poem creates that mood?
3. Find examples of personification and simile.
4. What are some of the ideas you hear expressed in this poem?

Part Three

MEDITATION AT OYSTER RIVER

1

Over the low, barnacled, elephant-colored rocks,
 Come the first tide-ripples, moving, almost without sound, toward me,
 Running along the narrow furrows of the shore, the rows of dead clam shells;
 Then a runnel behind me, creeping closer,
 Alive with tiny striped fish, and young crabs climbing in and out of the water.

No sound from the bay. No violence.
 Even the gulls quiet on the far rocks,
 Silent, in the deepening light,
 Their cat-mewing over,
 Their child-whimpering.

At last one long undulant ripple,
 Blue-black from where I am sitting,
 Makes almost a wave for a barrier of small stones,
 Slapping lightly against a sunken log.
 I dabble my toes in the brackish foam sliding forward,
 Then retire to a rock higher up on the cliff-side.
 The wind slackens, light as a moth fanning a stone:
 A fish raven turns on its perch (a dead tree in the rivermouth),
 Its wings catching a last glint of the reflected sunlight.

By Theodore Roethke

1. Select a couple of images and illuminate them. What is their effect on the poem?
2. How does the rhythm change in the second verse? How does this change your sense of what's happening?
3. There are a number of sounds repeated in line 3. How does the repetition match the sense of what's being described?

This is only the first of four parts of this poem. The poem is a "meditation" and not just a description of a place. Read parts 2-4 of "Meditation at Oyster River" and discuss how the focus of the poem changes.

NAME _____

2

The self persists like a dying star,
 In sleep, afraid. Death's face rises afresh,
 Among the shy beasts, the deer at the salt-lick,
 The doe with its sloped shoulders loping across the highway,
 The young snake, poised in green leaves, waiting for its fly,
 The hummingbird, whirring from quince-blossom to morning-glory --
 With these I would be.

And with water: the waves coming forward, without cessation,
 The waves, altered by sand-bars, beds of kelp, miscellaneous driftwood,
 Topped by cross-winds, tugged at by sinuous undercurrents
 The tide rustling in, sliding between the ridges of stone,
 The tongues of water, creeping in, quietly.

3

In this hour,
 In this first heaven of knowing,
 The flesh takes on the pure poise of the spirit,
 Acquires, for a time, the sandpiper's insouciance,
 The hummingbird's surety, the kingfisher's cunning --
 I shift on my rock, and I think:
 Of the first trembling of a Michigan brook in April,
 Over a lip of stone, the tiny rivulet;
 And that wrist-thick cascade tumbling from a cleft rock,
 Its spray holding a double rain-bow in early morning,
 Small enough to be taken in, embraced, by two arms, --
 Or the Tittewawasee, in the time between winter and spring,
 When the ice melts along the edges in early afternoon.
 And the midchannel begins cracking and heaving from the pressure beneath,
 The ice piling high against the iron-bound spiles,
 Gleaming, freezing hard again, creaking at midnight --
 And I long for the blast of dynamite,
 The sudden sucking roar as the culvert loosens its debris of branches and sticks,
 Welter of tin cans, pails, old bird nests, a child's shoe riding a log,
 As the piled ice breaks away from the battered spiles,
 And the whole river begins to move forward, its bridges shaking.

4

Now, in this waning of light, I rock with the motion of morning,
 In the cradle of all that is,
 I'm lulled into half-sleep
 By the lapping of water,
 Cries of the sandpiper.
 Water's my will, and my way.



Part Four

A GUIDE TO DUNGENESS SPIT

Out of wild roses down from the switching road between pools
 We step to an arm of land washed from the sea.
 On the windward shore
 The combers come from the strait, from narrows and shoals
 Far below sight. To leeward, floating on trees
 In a blue cove, the cormorants
 Stretch to a point above us, their wings held out like skysails.
 Where shall we waik? First, put your prints to the sea,
 Fill them, and pause there:
 Seven miles to the lighthouse, curved yellow-and-grey-mile
 Tossed among kelp, abandoned with bleaching rock reefs,
 Past reaches and currents;
 And we must go afoot at a time when the tide is heeling.
 Those whistling overhead are Canada geese;
 Some on the waves are loons,
 And more on the sand are pipers. There, Bonaparte' gulls
 Settle a single perch. Those are sponges.
 Those are the ends of bones.

NAME _____

If we cross to the inner shore, the grebes and goldeneyes
Rear themselves and plunge through the still surface,
Fishing below the dunes
And rising alarmed, higher than waves. Those are cockleshells.
And these are the dead. I said we would come to these.
Stoop to the stones.
Overturn one: the grey-and-white, inch-long crabs come pulsing
And clambering from their hollows, tiptoeing sideways.
They lift their pincers
To defend the dark. Let us step this way. Follow me closely
Past snowy plovers bustling among sand-fleas.
The air grows dense.
You must decide now whether we shall walk for miles and miles
And whether all birds are the young of other creatures
Or their own young ones,
Or simply their old selves because they die. One falls,
And the others touch him webfoot or with claws,
Treading him for the ocean.
This is called sanctuary. Those are feathers and scales.
We both go into mist, and it hooks behind us.
Those are foghorns.
Wait, and the bird on the high rook is a snowy owl.
Facing the sea. Its flashing yellow eyes
Turn past us and return;
And turning from the calm shore to the breakers, utterly still,
They lead us by the bay and through the shallows,
Buoy us into the wind.
Those are tears. Those are called houses, and those are people.
Here is a stairway past the whites of our eyes.
All our distance
Has ended in the light. We climb to the light in spirals,
And look, between us we have come all the way,
And it never ends
In the ocean, the spit and image of our guided travels.
Those are called ships. We are called lovers.
There lie the mountains.

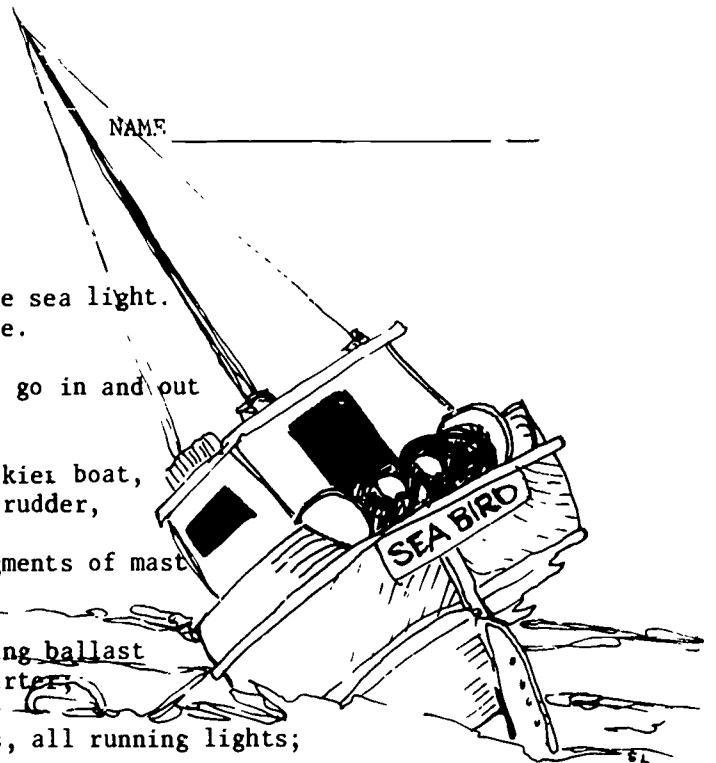
By David Wagoner

NAME _____

Part FiveTO THE MASTER OF SEA BIRD OF FRIDAY HARBOR

Wind north-by-east at noon. Sky heavy. The sea light.
 Your fishing boat lies portside on the shore.
 Through a six-foot hole in the hull
 Waves touch and go. Wrack whitens. Eddies go in and out
 Among the broken ribs where gravel gathers,
 Knocking high as the keel.
 If you survived the night, sir, in some luckier boat,
 You have lost, in a single blow, motor and rudder,
 Binnacle and wheel;
 Now held at length by a tangled cable, fragments of mast
 Are bobbing away. The chain and anchor
 Must have gone down as well.
 Here in the hulk, the cabin above my shifting ballast
 Has listed ninety degrees to a sleeping quarter;
 You have lost the fantail
 And bowsprit, most of the starboard strakes, all running lights;
 Your sea-blue dungarees lie soaking there
 Half under sand
 And salted down like fish. The fish caught dead to rights
 And held in the hold have broken out of the air
 To swim back where you found them
 Or to float off as freely as other jetsam. The nets
 Have settled down to hold themselves in place.
 And if you drowned
 In the heaving, heavy slopes, the grey rags of the Strait,
 Remember the rules. No passage is endless.
 Over rocks, even islands,
 The boat came pounding thirty miles to Dungeness Spit
 Without your help, throwing away the compass,
 Dowsing its lights in the wind,
 And tossing its name to pieces. Between the sea and its flights
 Against the shore, like fish or men out of water,
 Birds on the ground
 Will be picked clean for a time. By ancient salvage rights,
 I claim this poem from Sea Bird of Friday Harbor,
 Someday to be returned.

By David Wagoner



NAME _____

Part Six

NEAR CHILEAN MEMORIAL

You could skip every rock on this beach.
Looking for the change in each one
takes all I want to do. You carve
a cedar stick with your knife
sharpened by spittle and two stones.
I see so many curved wings, enough crows
for each day of the week. The stack
we scaled this morning for more vision
has become an island. A branch
has rolled off the fire; only a root
burns to be what it can.

You climb a headland to take a last picture
of the falling sun. A seal floats in close
to check our fire. Up the coast a few miles,
men are buried in their ship's mainsail.
Down the beach toward home all I see
is campfire reflecting off the faces
of an older couple. In the morning
they will wave and hike on.

It's nearly high tide; surf washes gravel
sixty feet away. These logs I'm against
have no bark. It has taken until now
to see more than one star. Out of the dark
you tell me, red sky at night
sailor's delight and point due West.

Coming off the beach at Rialto tomorrow
asphalt will feel awkward. We will look
across the Quillayute at the houses in LaPush
and stand twelve road miles away.
It's easier to look at the moon.
I could stay a long time here.
Stalk with the Great Blue Heron
who refuses to fly from this unnamed cove.

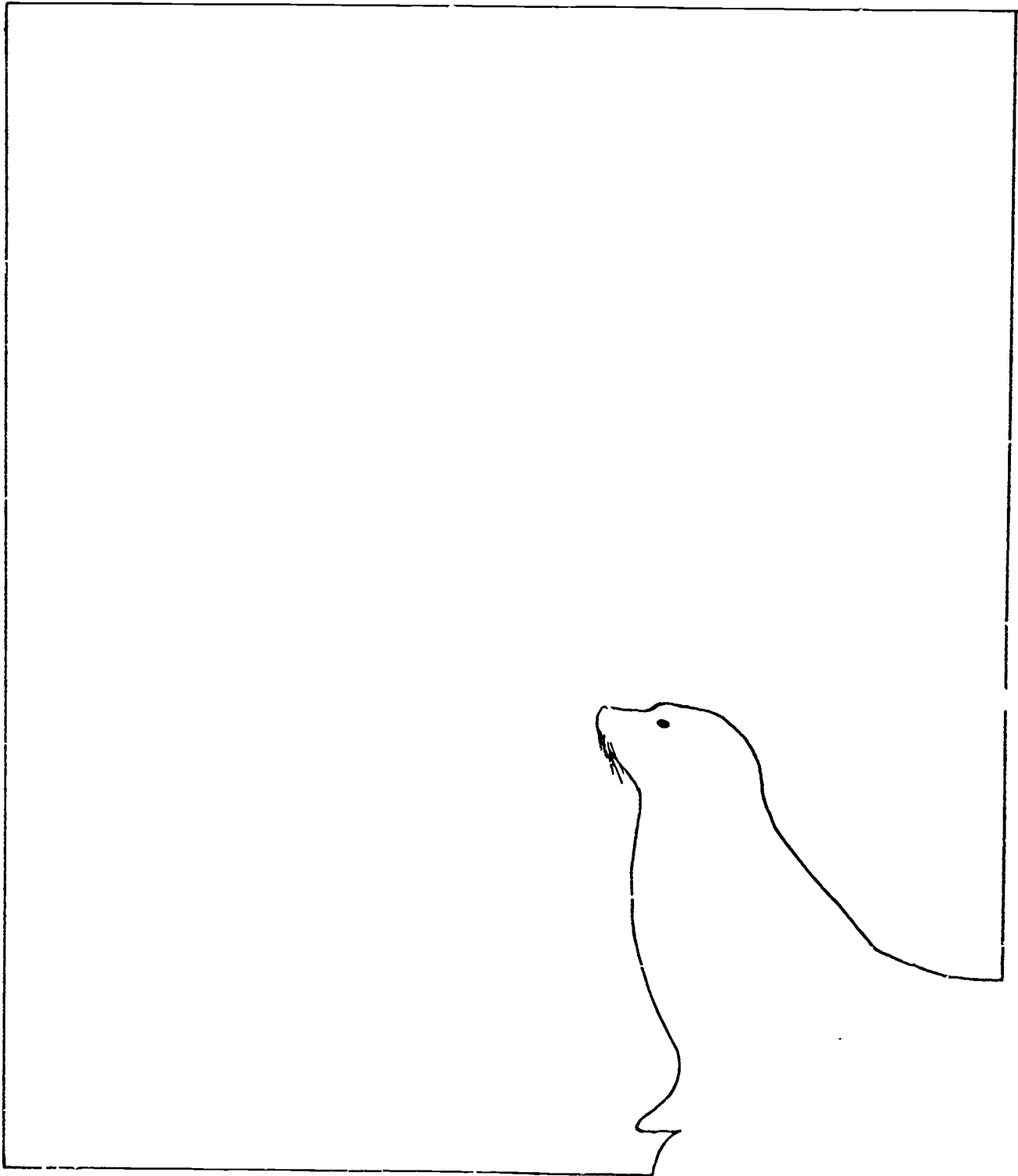
James Mitsiu

Part Seven

SWINOMISH CHANNEL

Goat Island is the knot
 tying off Skagit Bay
 where Swinomish threads Hole in the Wall.
 Pleats hiss off the bow,
 fold and unfold between high rock.
 the engine sings in unison
 with its shadow.
 Curve and color, the sand bar is
 stretched deer hide, is
 a drum decorated with shields.
 A pair of cormorants stretch and beat wet wings.
 Selvage of grass and sea grapes
 hems the open bolts of farmland.
 Above, a golden eagle circles,
 closes tight as a button,
 his talons stitch a mound of feathers.
 Whumf whumf,
 the rickety LaConnor docks hum
 like an old Singer, treadle back and forth
 rocked by our wake.
 Bowpickers and gillnetters lend line and spindle.
 Following the deepest cut we patch the channel markers
 into a comforter of orange throws.
 To the port, a skunk picks out the seams of picnic litter;
 starboard, brown-eyed children embroider marsh grass
 with yellow and red.
 We pass beneath two bridges fastened like clasps.
 Land falls back.
 The engine sings solo.
 My shoulders are cold.
 I wish I could keep the channel
 like a fabulous shawl around me.

Gladys Cardiff



**EVALUATION
VOCABULARY
BIBLIOGRAPHY**

Teacher Information

EVALUATION

PART A

1. In what way has your attitude toward the sea or Puget Sound been changed? How and what specifically contributed to this change?

(Answers will vary)

2. Which poet(s) came closest to expressing feelings you have had for the sea? Were there any phrases or images that particularly caught an experience/feeling of yours by the sea?

(Answers will vary)

3. Choose two of the following concepts and respond briefly.

- a. sea floor spreading - *concept that the sea floor is spreading at a rate of several centimeters per year along the mid-ocean ridges*
- b. salinity - *amount of dissolved salts in seawater*
- c. tides - *the rhythmic rising and falling of the ocean waters. Caused by a complex interaction between the sun, moon and earth*
- d. beach zones (splash; upper, middle and lower intertidal zones) *The beach is divided up into different zones, based on depth. Because of the tides, the zones undergo changes in their environment daily. The marine life found in a particular zone will depend on its ability to adapt to these changes in water depth, salinity, ultra-violet radiation, wave energy etc.*
- e. trade-off - *concept that issues, in this unit primarily environmental, are complex and human interaction will have effects on the marine world and these effects need to be weighted with benefits gained*
- f. the ocean as a resource - *the ocean provides many resources including minerals, raw materials, oxygen, food, transportation, and recreation.*
- g. effects of the ocean/Puget Sound on the surrounding region - *creates milder temperatures than normal this far north, increases rainfall, affects the economy through fishing industry, shipping industry, tourist industry*

4. Briefly evaluate your experience with this curriculum. (What kinds of things did you learn about the world of water? Did your interest in poetry change?)

(Answers will vary)

Part B

Read the poem below and respond to the questions which follow.

MUSSELS

In the riprap
in the cool caves,
in the dim and salt-refreshed
recesses, they cling
in dark clusters,
in barnacled fistfuls,
in the dampness that never
leaves. in the deeps
of high tide. in the slow
washing away of the water
in which they feed,
in which the blue shells
open a little, and the orange bodies
make a sound,
not loud,
not unmusical, as they take
nourishment, as the ocean
enters their bodies. At low tide
I am on the riprap, clattering
with boots and a pail,
rock over rock; I choose
the crevice, I reach
forward into the dampness,
my hands feeling everywhere
for the best, the biggest. Even before
I decide which to take,
which to twist from the wet rocks,
which to devour,
they, who have no eyes to see with,
see me, like a shadow,
bending forward. Together
they make a sound,
not loud,
not unmusical, as they lean
into the rock, away
from my grasping fingers.

By Mary Oliver

Teacher Information

1. Describe the rhythm of this poem. How is the rhythm achieved and what affect does it have on the sense of the poem?
(Answers may vary - some ideas include that the punctuation/pauses creates a rhythm like waves. Also the rhythm is affected by use of assonance, alliteration, repetition, etc.)
2. Distinguish between the "facts" and the "feelings" contained in this poem.
Facts include: the difference between mussels at high tide vs. low tide, that mussels are gathered during low tide, the descriptions of the water/caves etc. Feelings include: the description that the mussels lean away from the hands, the image of the sound the mussels make, the feeling that the mussels see her
3. Find examples of repetition. How does this relate to what is going on in the poem?
(Answers may vary - one idea is that the repetition reflects the cycle of high tide to low tide or of the motion of waves.)
4. Find examples of assonance and alliteration.
*Assonance: leaves, deeps; sound, loud; best, biggest; see, me;
Alliteration: riprap; cool caves; washing away of the water, the best, the biggest; etc.*
5. Find in the poem, or make up on your own an example of the following:
simile- *see me, like a shadow*

imagery - cling in dark clusters, lean into the rock, gripping fingers, etc.

personification- they who have no eyes to see with, see me, together they make a sound
6. Briefly discuss your reaction to this poem, or another poem discussed in this unit.

(Answers will vary)

Part C

Select a poem not included in this unit, preferably about the world of water, and discuss what you discovered in it.

NAME _____

EVALUATION

PART A

1. In what way has your attitude toward the sea or Puget Sound been changed? How and what specifically contributed to this change?

2. Which poet(s) came closest to expressing feelings you have had for the sea? Were there any phrases or images that particularly caught an experience/feeling of yours by the sea?

3. Choose two of the following concepts and respond briefly.
 - a. sea floor spreading

 - b. salinity

 - c. tides

 - d. beach zones (splash; upper, middle and lower intertidal zones)

 - e. trade-off

 - f. the ocean as a resource

 - g. effects of the ocean/Puget Sound on the surrounding region

4. Briefly evaluate your experience with this curriculum. (What kinds of things did you learn about the world of water? Did your interest in poetry change?)

Part B

Read the poem below and respond to the questions which follow.

MUSSELS

In the riprap
in the cool caves,
in the dim and salt-refreshed
recesses, they cling
in dark clusters,
in barnacled fistfuls,
in the dampness that never
leaves. in the deeps
of high tide. in the slow
washing away of the water
in which they feed,
in which the blue shells
open a little, and the orange bodies
make a sound,
not loud,
not unmusical, as they take
nourishment, as the ocean
enters their bodies. At low tide
I am on the riprap, clattering
with boots and a pail,
rock over rock; I choose
the crevice, I reach
forward into the dampness,
my hands feeling everywhere
for the best, the biggest. Even before
I decide which to take,
which to twist from the wet rocks,
which to devour,
they, who have no eyes to see with,
see me, like a shadow,
bending forward. Together
they make a sound,
not loud,
not unmusical, as they lean
into the rock, away
from my grasping fingers.

By Mary Oliver

1. Describe the rhythm of this poem. How is the rhythm achieved and what affect does it have on the sense of the poem?

2. Distinguish between the "facts" and the "feelings" contained in this poem.

3. Find examples of repetition. How does this relate to what is going on in the poem?

4. Find examples of assonance and alliteration.

5. Find in the poem, or make up on your own an example of the following:
simile-

imagery-

personification-

6. Briefly discuss your reaction to this poem, or another poem discussed in this unit.

Part C

Select a poem not included in this unit, preferably about the world of water, and discuss what you discovered in it.

Assonance:	repetition of the same vowel sound
Alliteration:	repetition of the same initial consonant sound
Continental Margin:	the part of the ocean floor next to the continents; comprised of continental shelf, slope and rise
East Pacific Rise:	underwater mountains in the Pacific Ocean
End Rhyme:	rhyme occurring at the end of a verse line
Free Verse:	a type of poetry which typically does not use end rhyme or regular meter
Half Rhyme:	when the final consonants are the same but the vowel sounds are different.
Internal Rhyme:	rhyme contained within a line of verse
Metaphor:	an implied comparison of two objects, not using as or like
Meter:	pattern of stressed and unstressed syllables
Neap Tides:	highest low tides and lowest high tides which occur when the earth and moon are perpendicular to one another
Onomatopoeia:	words that represent a thing or action by imitating the sound associated with it
Personification:	attributing human qualities to non-human things
Plate Tectonics:	idea that the earth's crust is composed of plates which float on the earth's mantle
Salinity:	amount of dissolved salts in seawater
Scansion:	the analysis of the meter of a poem through marking stressed and unstressed syllables
Sea Floor Spreading:	idea that the sea floor is spreading (at a rate of several centimeters per year) along the mid-ocean ridge
Simile:	a direct comparison of two dissimilar objects using a connective word, usually as or like
Spring Tides:	the highest high tides and lowest low tides, which occur when the sun and moon are lined up with the earth (during full and new moon periods)

- Trade Off: concept that issues, such as use of ocean's resources, are complex and human interaction will have effects on the marine world and need to be weighed with benefits gained
- Upwelling: replacement of surface water by nutrient-rich colder, deeper waters when winds and surface currents force water away from the continents
- World of Water: term used by marine educators to describe the earth as 70% of its surface is composed of water

NAME _____

Assonance:

Alliteration:

Continental Margin:

East Pacific Rise:

End Rhyme:

Free Verse:

Half Rhyme:

Internal Rhyme:

Metaphor:

Meter:

Neap Tides:

Onomatopoeia:

Personification:

Plate Tectonics:

Salinity:

Scavision:

Sea Floor Spreading:

Simile:

Spring Tides:

NAME _____

Trade Off:

Upwelling:

World of Water:

POETRY REPRINT PERMISSION INFORMATION

Activity Two

"Within the Wave" by Ann Morrow Lindbergh. From The Unicorn and Other Poems by Anne Morrow Lindbergh. Copyright c 1956 by Anne Morrow Lindbergh. Reprinted by permission of Pantheon Books, A Division of Random House Incorporated.

Activity Three

"Winter Ocean" by John Updike. From Telephone Poles and Other Poems by John Updike. Copyright c 1960 by John Updike. Reprinted by permission of Alfred A. Knopf, Inc.

"Fog" by Crosbie Garstin. From Vagabond Verses

"Fog" by Carl Sandburg. From Chicago Poems c 1916. Holt, Rinehart and Winston, Inc. Copyright 1944 by Carl Sandburg. Reprinted by permission of Harcourt, Brace Jovanovich, Inc.

"Voyages I" by Hart Crane. "Voyages I" is reprinted from The Complex Poems and Selected Letters and Prose of Hart Crane. Edited by Brom Weber, with the permission of Liveright Publishing Corporation. Copyright c 1933, 1958, 1966 by Liveright Publishing Corporation.

"Sea Lullaby" from Collected Poems of Elinor Wylie. Copyright 1932 by Alfred A. Knopf Inc. and renewed 1960 by Edwina C. Rubinstein. Reprinted by permission of Alfred A. Knopf, Inc.

Activity Four

"Outer Space, Inner Space" by Gladys Cardiff. From To Frighten A Storm by Gladys Cardiff. Copyright c 1976 by Gladys Cardiff. Reprinted by permission of Copper Canyon Press, Port Townsend, WA.

"This Poem Is Not About Whales" by Judith Fitzgerald. Copyright c 1977 by Judith Fitzgerald. Used by permission.

"If Whales Could Think on Certain Happy Days" by Irving Layton. From The Shattered Plinths by Irving Layton. Reprinted by permission of The Canadian Publishers, McClelland and Stewart Limited. Toronto, Canada.

Activity Five

"Washington Coast" by Nelson Bentley. From "Sea Lion Caves and Other Poems". Reprinted by permission of the poet.

"Cannon Beach" by Nelson Bentley. From Sea Lion Caves and Other Poems. Reprinted by permission of the poet.

"Meditation at Oyster River: Part I" by Theodore Roethke. From The Collected Poems of Theodore Roethke. Copyright c 1963 by Beatrice Roethke, Executrix of the Estate of Theodore Roethke. Used by permission of Doubleday and Co. Inc.

"A Guide to Dungeness Spit" by David Wagoner. From The Nesting Ground. Reprinted by permission of Indiana University Press.

"To the Masters of Sea Bird of Friday Harbor" by David Wagoner. From The Nesting Ground. Reprinted by permission of Indiana University Press.

"Near Chilean Memorial" by James Mitsui. From Journal of the Sun by James Mitsui. Copyright c 1974 by Copper Canyon Press. Reprinted by permission of the poet.

"Swinomish Channel" by Gladys Cardiff. From To Frighten A Storm. Reprinted by permission of Copper Canyon Press. Port Townsend, WA.

BIBLIOGRAPHY

Bentley, Nelson. Sea Lion Caves and Other Poems. Denver. Alan Swallow. 1966.

Cole, William, editor. The Sea, Ships, and Sailors. New York: The Viking Press. 1967.

Cardiff, Gladys. To Frighten A Storm. Copper Canyon Press: Port Townsend, WA 1976.

Cousteau, Jacques-Yves and James Dugan, editors. Captain Cousteaus' Underwater Treasury. New York: Harper and Brothers. 1959

Ellmann, Richard and Robert O'Clair, Editors. Norton Anthology of Modern Poetry. W.W. Norton and Company. New York, NY. 1970.

Fuller, Edmund and B. Jo Kinnick. Adventures in American Literature. New York: Harcourt, Brace and World, Inc. 1963.

Gatenby, Greg, editor. Whale Sound North Vancouver, Canada: J. J. Douglas, Ltd., 1977.

Goodwin, Harold and James Schaadt. "A Statement on the Need for Marine and Aquatic Education." Seagrant. March, 1978.

Greis, Noel P. Oceans. Pendulum Press, Inc. West Haven, CT 1975.

Heitzmann, William Ray. "America's Forgotten Marine Heritage", Sea World. (Spring, 1978), p. 53.

Kennedy, X.J. An Introduction to Poetry. Fourth Edition. Little, Brown and Company: Boston, MA 1978.

Lindbergh, Ann Morrow. The Unicorn. New York: Pantheon Books, Inc 1956.

Matthiessen, F.O. The Oxford Book of American Verse. Oxford: Oxford University Press, 1950.

Mitsui, James. Journal of the Sun. Copper Canyon Press: Port Townsend, WA 1974.

Molloy, Paul, editor. Poetry U.S.A. New York: Scholastic Book Services, 1968.

ORCA: Marine Education Project. "Beach Profiles and Transects."
Pacific Science Center. 1978.

ORCA: Marine Education Project. "Literature and the Sea."
Pacific Science Center. 1978.

ORCA: Marine Education Project. "Marine Biology Activities."
Pacific Science Center. 1981.

ORCA: Marine Education Project. "Marine Biology Field Trip
Guide." Pacific Science Center. 1981

ORCA: Marine Education Project. "Marshes and Estuaries."
Pacific Science Center. 1981

ORCA: Marine Education Project. "Squalls on the Nisqually."
Pacific Science Center. 1981

O'Shea, Michael W. "The Interdisciplinary Nature of Marine
Science," Sea World (Spring 1978) p. 53.

Rand McNally Atlas of the Oceans. New York: Rand McNally
and Company, 1977.

Roethke, Theodore. The Far Field. New York: Doubleday and
Company, Inc., 1964.

Roethke, Theodore. The Collected Poems of Theodore Roethke.
Doubleday and Co., Inc.: Garden City, NY 1966.

Spilhaus, Athenstan. "To See the Oceans, Slice Up the Land."
Smithsonian. November 1979. Volume 10, No. 8. pp. 116-122.

Wagoner, David. The Nesting Ground. Bloomington, Indiana:
Indiana University Press, 1963.