

Port of Seattle



Teacher Resources

Seaport Secondary 7-12



NOTES TO TEACHERS

The most successful visits to the Port of Seattle are those in which the teachers and chaperones have prepared their students by giving them a beginning vocabulary and an introduction to port functions and trade.

This resource guide is divided into pre-visit, during and post-visit lessons and activities. The materials will help prepare your students, check for understanding and make their visit more meaningful.

We are looking forward to your visit to the Port of Seattle and hope these lessons and suggestions will make your visit educational and fun.

*Port of Seattle
Sea-Air School Staff*

CHOOSING LESSONS FOR YOUR SEAPORT VISIT

-SECONDARY-

Certain lessons in this booklet are for all students, however, depending on the tour you choose some are more appropriate as pre-visit or follow-up activities .

Getting to Know Your Seaport

Pre-visit:

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- 2. Vocabulary Familiarization 10
- 3. Pre-visit Brainstorming of Knowledge 12
- 4. *Expectations for the Visit 14

(* Must be completed before visit.)

During Your Visit:

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- 2. The Seattle System 16

After Your Visit:

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- 2. Making & Playing a Port Jeopardy Game 20
- 3. Port! A Bingo-like Game 23
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PRE-VISIT MATERIALS

Before your field trip to the Port of Seattle, help your students gain an understanding of what a port does and the vocabulary that will be used. Choose a few of the lessons in this resource guide and incorporate them into your classroom activities.

Also, prior to your visit, duplicate and discuss the Expectations sheet on page 14 with your students. It will be helpful if your chaperones are also familiar with the Expectations. Our goal is for everyone to have an educational and fun field trip experience.

The lessons included in this unit are:

- 1. Orientation to the Port**
- 2. Vocabulary Familiarization**
- 3. Previsit Brainstorming of Knowledge**
- *4. Expectations for the Visit**

*Must be completed before visit

ORIENTATION TO THE SEAPORT

Grades: 6-9

EALR's: Communication: 1.1, 1.2, 2.2, 3.2, 3.3

Writing: 2.4

SS-Economics: 1.1, 1.2, 1.4, 1.5

SS-Geography: 2.2, 2.3, 3.1, 3.2

SS-History: 1.2, 2.1

WHAT IS THIS LESSON ABOUT?

This lesson helps students recall and share some of the basic concepts and vocabulary that will be used by the speakers and guides on your field trip. If all students are familiar with the terms that are to be used, they will benefit more from their experiences.

MATERIALS

Make copies of the four sheets on Port Facilities, Port Functions, Port History/Changes and Port Careers. A map of the Port would be helpful for students. Students can supply their own paper, especially if they work individually, but if you have groups working together, butcher paper sheets would be helpful.

HOW ARE WE GOING TO DO IT?

1. Ask your students to think about the Port of Seattle. If they have visited previously or driven by, they can use first hand experiences; if they have not, they can think of information presented in newspaper articles, television shows or on the internet.

2. Divide your class into four groups. You could have students work individually and just have them number off one through four around the class, or you could set up groups of three or four to work together on a sheet of butcher paper.

Have the students or group number one put Port Facilities in the center of their paper. They will spend ten minutes writing down ideas they have about what facilities are used and available at the Port.

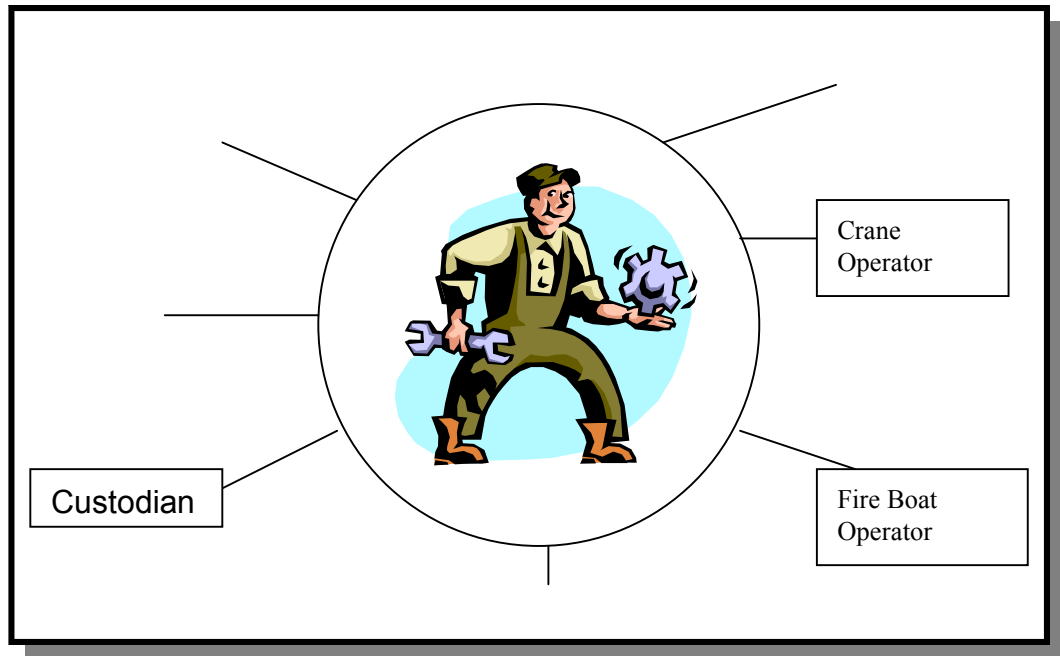
Have the students or group number two put Port Functions in the center of their paper. They will spend ten minutes writing down ideas they have about what functions and services are provided by the Port.

Have the students or group number three put Port History/Changes in the center of their paper. They will spend ten minutes writing down ideas they have about the history of the Port and changes that have taken place during the years since the Port began in 1911.

Have the students or group number four put Port Careers in the center of their paper. They will spend ten minutes writing down ideas they have about jobs and careers that are a part of the Port.

If necessary, put a sample mind map on the board to get students started.

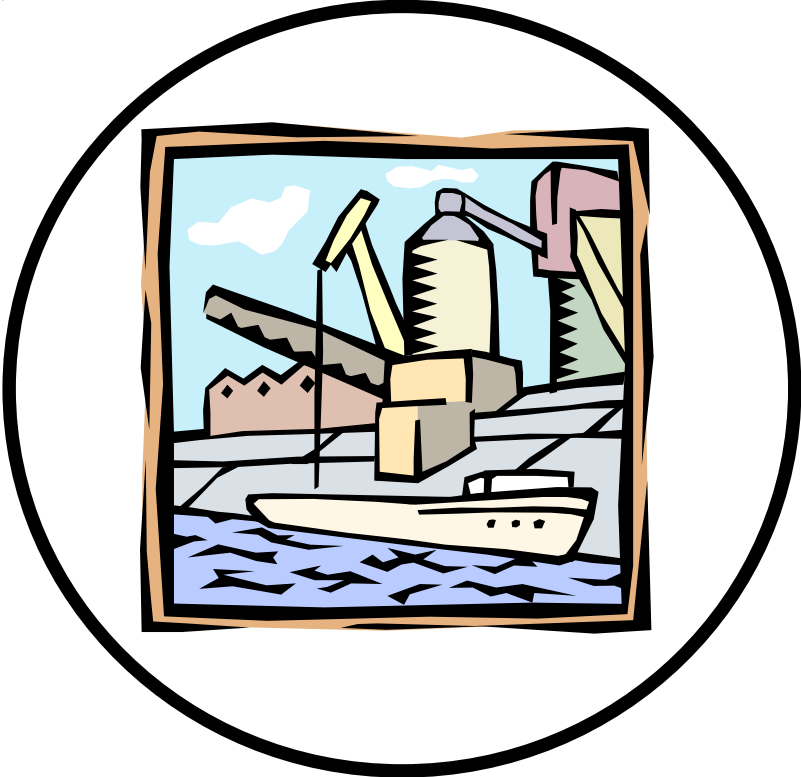
ORIENTATION TO THE PORT



3. Give the students ten or so minutes to work; judge at the end of ten minutes whether they are still busy and need a few more minutes.
4. Call the students back to order. Use the four overhead sheets in the order assigned and call upon all of the people who worked on a topic to volunteer ideas which should then go onto the class sheets which you will record on the overhead.
5. If time permits, ask students to note the two or three things at the Port they are most looking forward to seeing during their visit.

ORIENTATION TO THE PORT

Port Facilities



ORIENTATION TO THE PORT

Port Functions



ORIENTATION TO THE PORT

Port History/Changes



VOCABULARY FAMILIARIZATION

Grades: 6-8

EALR's: Communication: 1.1, 1.2, 1.3, 2.2, 3.1, 3.2, 3.3

Reading: 1.1, 1.2, 2.1, 3.1, 3.2, 3.4

Writing: 1.2

SS-Economics: 1.1, 1.2, 1.4, 1.5

SS-Geography: 2.1, 2.2, 2.3, 3.2

SS-History: 1.2

WHAT IS THIS LESSON ABOUT?

The vocabulary familiarization lesson is designed to focus student attention on the special use of words and concepts as related to the Port of Seattle Seaport. Encouraging students to categorize words and then discussing their choices gives practice in higher level thinking skills.

These vocabulary words are derived from the information presented on the tour, *the Seattle Seaport fact sheet*. When used as a pre-visit activity, there are no wrong answers as students develop their lists. It is more important that students provide a rationale for their choices.

If you choose to use this activity as a follow up to the tour, you may want to have students develop written definitions based on their experiences and the information provided on the tour. Having each student develop definitions in only one category, perhaps for younger students, encourages depth. Placing that student in a group of six, each responsible for one category, promotes cooperative group learning.

MATERIALS

One copy of student vocabulary page for each student.

HOW ARE WE GOING TO DO IT?

1. Introduce the activity by announcing the field trip to the Port of Seattle waterfront. Tell the students that before they go, they need to check their familiarization with words commonly associated with the Port.
2. Pass out the sheets and go over the directions.
3. Give adequate work time.
4. Provide for an opportunity to share with a partner.
5. Discuss questions, insights.

VOCABULARY

Student Worksheet

Name _____

On the back of this page, create six columns: History, Trade, Transportation, Geography, Technology, and Economics.

As you think about the Port of Seattle, determine which column each of the following vocabulary words would best fit under.

When you have placed each word in only one column, compare your lists with a partner. Discuss differences.

Keep this list until you return from the field trip. Revise it if necessary.

***USE EACH WORD ONLY ONCE**

international	dependent	containers
quarantine	Pacific Rim	Captain Vancouver
export	tourism	crane
barge	navigation	dry dock
tonnage	import	lease
Harbor Island	balance of trade	moorage
sonar	pier	bulbous bow
freighter	terminal	Midwest
Asia	hops	Alaska Square
safety	cutter	frigate
knots	intermodal yard	Kellogg Island
Smith's Cove Park	bow thruster	tug boat
Elliott Bay Park	commissioners	Duwamish River
tides	radar	commerce
advertising	foreign goods	services
Chief Sealth	gateway	cargo
doublestack	waterborne	economic impact
revenues	Continental Divide	customhouse
stevedores	Seattle Fire	Alaska Goldrush
voters	hides	transit

BRAINSTORMING KNOWLEDGE ABOUT THE PORT

Grades: 6-9

EALR's: Communication: 1.1, 1.2, 1.3, 3.1, 3.2, 3.3

Reading: 1.1, 1.2, 2.1, 2.2

SS-Civics: 4.3

SS-Economics: 1.1, 1.2, 1.3, 1.4, 1.5

SS-Geography: 2.3

SS-History: 1.2, 1.3, 2.1, 2.3

WHAT IS THIS LESSON ABOUT?

This lesson will help prepare your students for their visit to the Port of Seattle Seaport. Using groups, the goal of the lesson is to encourage discussion and thought about the Port.

Every statement on the student sheet is true. The information is taken from *the Seattle Seaport fact sheet* which you will find in your folder. It is not critical that the students get all the answers "right." What is critical is that they determine, through discussion, a rationale for their consensus.

MATERIALS

One copy of the student sheet for each student.

HOW ARE WE GOING TO DO IT?

1. Introduce this lesson by asking for opinions on what are the leading exports from Washington state and what are the leading imports (by value). List student responses on the board or overhead without making any judgment. Encourage students to give reasons for their answers.
2. Pass out student activity sheet. Organize class for small group work. Tell students that they each must pass in a student activity sheet with their group decisions marked. Give 15 or 20 minutes for the activity.
3. Debrief by having each group report their decision on each statement. Encourage diverse opinions backed up by reasons.
4. You may or may not want to tell the class that all the statements are true. You may want to wait until you return from the field trip and then take a few minutes to encourage the students to revise their opinions.

BRAINSTORMING KNOWLEDGE ABOUT THE SEAPORT

Student Worksheet

NAME _____

Sit with one or two other students. Read through the following statements about the Port of Seattle Seaport. Put a check mark by each statement you agree is a true statement.

- By value, leading exports are industrial equipment, beef, pork, poultry, inorganic chemicals, frozen fish and oilseeds.
- By value, leading imports are apparel, motor vehicle parts, toffice and data processing machines, footwear, and games/video games.
- King County voters established the Port district in 1911.
- The Port finances operations and capital improvements with revenues from leases, rentals and other charges to steamship companies, airlines and other users.
- The Port levies property tax for property acquisitions and capital improvements on the Seattle Harbor, collecting 26 cents out of every \$1,000 of property tax revenue in King County.
- Cruise ships are involved in international trade.
- Seattle's two-way trade is valued at \$29 billion annually.
- Two-way trade through the Port involves 150 countries around the world.
- More than 112 oceangoing vessels call per month.
- Washington State conducts more international trade than any other state on a per capita basis, resulting in 1 out of 4 jobs impacted by trade. (according to a 2001 report census)
- The Port has 567 acres of container terminal facilities.
- More than 100 cruise ships will call on the Port of Seattle this season.
- Fishermen's Terminal and Shilshole Bay Marina are part of the Port.

STUDENT EXPECTATIONS FOR A FIELD TRIP TO THE THE PORT OF SEATTLE'S SEAPORT

The Port services are unique because of the combination of businesses involved in the shipping industry: steamship lines, rail and truck carriers, freight forwarders, customhouse brokers and stevedores.

Students will learn about:

- the seaport facilities of the Port of Seattle
- the functions of the Port of Seattle
- the history of the Port of Seattle and changes which have taken place
- the careers of people who work on the Seaport side of the Port of Seattle

We expect students to:

1. Wait quietly before instructions are given.
2. Obey any requests made by the speakers and guides.
3. Listen attentively and politely to all speakers and guides.
4. Raise a hand if they wish to ask a question.
5. Remain seated during the classroom section of the boat trip.
6. Take notes which will be shared with the rest of the class.
7. Stay together as a group while moving around the boat.
8. Walk at all times- no running.
9. Hold on to the handrails when going up and down the stairs. The boat can rock from waves at anytime.
10. No eating or drinking during the boat trip.
11. Leave music devices, cell phones, beepers or other distractions off.

The Port of Seattle is happy to welcome you. We have made arrangements that will make this an educational and a fun experience, so please follow the Expectations listed above.

DURING THE VISIT

Grades: 6-9

EALR's: SS-Economics: 1.1, 1.2, 1.4, 1.5

SS-Geography: 2.1, 2.2, 2.3

WHAT IS THIS LESSON ABOUT?

While your students are on the boat trip around the facilities of the Port of Seattle, they will complete a map which locates the places they have visited and they will take notes which can be shared when they return to class.

MATERIALS

Make copies of the map for each student. They will also need to bring some writing instrument to use.

HOW ARE WE GOING TO DO IT?

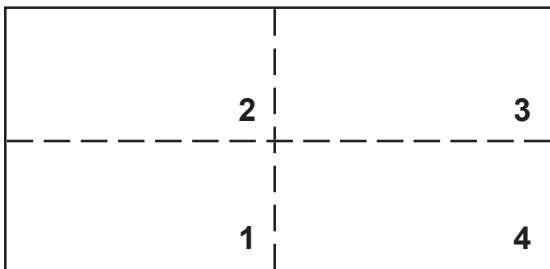
1. You will need to decide whether to hand out the copies of the map before you go on the field trip or just prior to the time that the students board the boat. You do need to remind them to bring some writing instrument.
2. Indicate to students that as they are on the boat trip they will be seeing and hearing. (See diagram for folding) As they move from quarter to quarter, they will simply turn over and over their sheets.



A.



B. Fold in half - map inside



C . Open



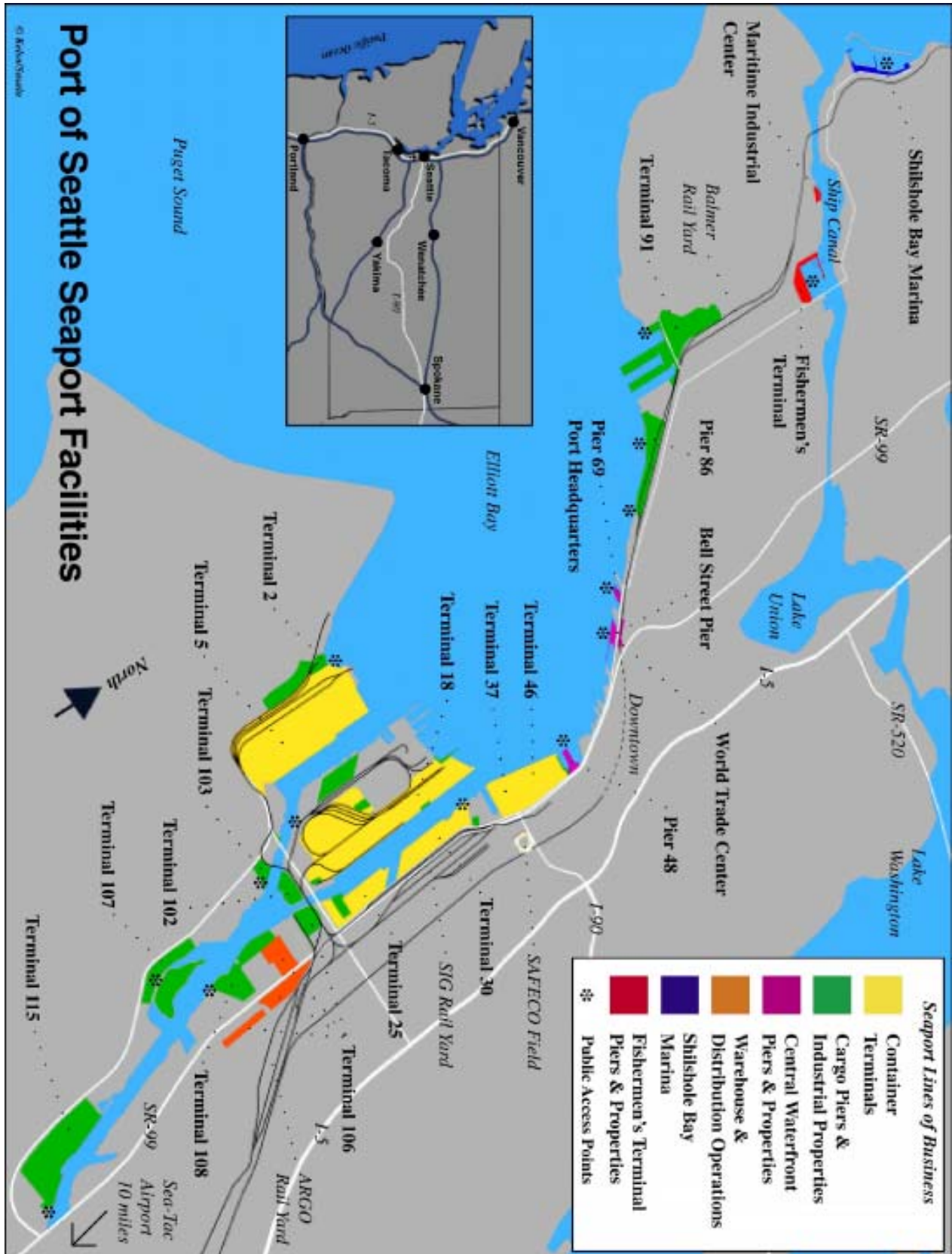
D. Reverse fold direction - map outside



E. Fold in to create a quarter-size booklet - map on outside

THE SEATTLE SYSTEM

PORT OF SEATTLE CONTAINER TERMINALS AND DISTRIBUTION FACILITIES



FOLLOW-UP MATERIALS

After your visit, we suggest that you spend a class period or two providing closure for your class. So often field trips happen and then are never referred to or used again. We believe that by debriefing the experience you empower the field trip academically and provide an opportunity for your students to use their experience in meaningful ways.

The following is a list of the lessons provided to enhance and ease this process:

- 1. Thank You Notes.**
- 2. Making and Playing a Port Jeopardy Game.**
- 3. PORT! A Bingo-like Game.**
- 4. How to Use The Seattle Harbor fact sheet.**
- 5. Sea Air: A Port Partnership.**

THANK YOU NOTES

Grades: 6-12

EALR's: Communication: 2.1, 2.2, 2.3, 2.4

Writing: 1.2, 1.3, 2.1, 2.2, 3.1, 3.2,
3.3, 3.4, 3.5

WHAT IS THIS LESSON ABOUT?

Thank you notes are a courteous way to respond to the fieldtrip. The notes are helpful for the Port of Seattle staff because they reinforce the good aspects of the program and they may also suggest changes.

MATERIALS

Review the proper form for a business thank you. You may have students use their own paper, or provide copies of the Thank You Note form, or have them type their letters. It is easier if you pool the thank you notes in one envelope and send it to the Port. The address is:

**Port of Seattle
Public Affairs
Sea-Air School
P. O. Box 1209
Seattle, WA 98111**

HOW ARE WE GOING TO DO IT?

1. Review with your students some of the highlights of the fieldtrip to the Port of Seattle. Encourage students to be specific in their praise and their suggestions.
2. Review the parts of a business thank you letter.
3. You might ask your students to type or wordprocess their thank you notes to make them appear more business like.
4. Assign a time for completion so you can mail all of them at the same time.

THANK YOU NOTE FORM

Student Worksheet (Your return address)

Chinook Middle School
2001 98th Avenue N.E.
Bellevue, WA 98004
DATE

Port of Seattle
Public Affairs
Sea-Air School
P.O. Box 1209
Seattle, WA 98111

(Address of recipient)

Dear Port Officials:

(Greeting, followed by a colon)

On, insert date, our class took a field trip to the Port of Seattle to learn about the Port facilities and functions. We really appreciated this opportunity because...

(General introduction)

Some highlights of the trip included...

Thank you very much for providing this opportunity for our class to learn about the Port. We appreciate...

(add specifics)
(Closing)

Sincerely,

(Signature)

(Typed name)

Carl Container

MAKING AND PLAYING A PORT JEOPARDY GAME

Grades: 8-12

EALR's: Communication: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3

Reading: 1.1, 1.2, 2.1, 3.1, 3.2

Writing: 1.1, 1.2, 2.1, 2.2

SS-Civics: 4.3

SS-Economics: 1.1, 1.2, 1.4, 1.5

SS-Geography: 2.3, 3.3

SS-History: 1.2, 1.3, 2.1, 2.3, 3.3

WHAT IS THIS LESSON ABOUT?

During their field trip and associated studies, students should have learned a lot about the Port of Seattle. This activity allows them to put that knowledge into a concrete form and then use it as a basis for review with other students in the class. These games can be used repeatedly whenever time allows.

MATERIALS

Reproduce the questions and category board for each pair of students. You may want to have extras as they play one another's games. Also make copies of the Jeopardy Rule Sheet. Students will supply their own paper for the questions and answers.

HOW ARE WE GOING TO DO IT?

1. Remind students that they have learned a lot about the Port of Seattle during their field trip and associated studies. Now they will have a chance to review and share this material by creating and playing a Jeopardy game.
2. Divide the students into pairs. Each pair will write questions and answers for the five given categories. These categories correspond to the categories covered during the fieldtrip. For each category students will need to make five questions and rank them from one to five according to their difficulty. Students may also include a "Daily Double" question.
3. After each team has prepared their 25 questions, they work with another team to play the game. The creators are the questioners while the other team becomes the contestants who vie with one another to get the most points.
4. After one team has played their game and a winner has been declared for the other pair, then the roles are reversed when they play the other pair's game.
5. With another copy of the score sheet, the same questions can be reused with another

MAKING AND PLAYING A PORT JEOPARDY GAME

Student Worksheet Jeopardy Rule Sheet

set of “contestants.”

Work with a partner to create a Jeopardy game based on the information that you have gathered about the Port of Seattle.

Look at the gameboard. There are five categories listed at the top. You and your partner will need to create five questions and answers for each category and then prioritize them by difficulty with the hardest being worth five hundred dollars and the next hardest worth four hundred and the easiest being worth one hundred.

You may include a “Daily Double” somewhere on the board if you wish.

Remember that in Jeopardy you give the answer and the contestants must come up with the question.

Once you have all 25 questions written and ordered, you are ready to play with another team.

You will need to get a gameboard sheet which will be placed in front of the two “contestants” from the other team. One of you will be the quizmaster and ask the questions; the other will be the timer, score keeper and marker.

Decide by a flip of a coin who will ask first. That person asks until they miss and the other person has a chance.

The quizmaster simply gives the answer on the sheet when a contestant asks for that category and amount. The quizmaster must check to see if the question asked is correct and give feedback.

The scorer must keep scores for the two contestants and must also mark off on the gameboard when questions have been asked so the contestants will know not to ask for that question again.

Have fun and learn a lot. The game can be informative as well as enjoyable.

Your questions can be used again with new contestants. All you need is a new gameboard on which to mark off the questions.

MAKING AND PLAYING A PORT JEOPARDY GAME

Student Worksheet Gameboard

Port Facilities	Port Functions	Port History/Changes	Port Careers	Port Places on the Map
\$500	\$500	\$500	\$500	\$500
\$400	\$400	\$400	\$400	\$400
\$300	\$300	\$300	\$300	\$300
\$200	\$200	\$200	\$200	\$200
\$100	\$100	\$100	\$100	\$100

PORT! A BINGO-LIKE GAME

Grades: 6-9

EALR's: Communication: 1.1, 1.2

Economics: 1.2, 1.4, 1.5

History: 1.2

WHAT IS THIS LESSON ABOUT?

When you return from your field trip, follow-up activities provide closure, check understanding and reinforce key concepts. This activity is easier to do with grades 6 and up as students create their own "PORT!" board to play a game like Bingo.

MATERIALS

Students each need a pencil and a piece of 8 1/2" X 11" paper, like notebook paper. It doesn't matter if it has lines or not.

HOW ARE WE GOING TO DO IT?

1. Ask your students to recall their trip to the Port by listing words that trigger memories. List these words on board or overhead. Try to get one word from each student, with no repetitions.
2. Now ask your students to fold a piece of paper in half. Then fold it in half again. Now fold that in half. One more time! Each student should end up with a paper, that when unfolded, has sixteen squares.
3. Tell your students that they are going to create their own personal PORT! boards, just like Bingo boards. They should choose from the words just listed and write one word in each square, sprinkling them all over their board. Remind them they need only 16 words and you have generated many more than that on your class list so no one should have a board identical to anyone else's.
4. When all the students are ready, randomly call out words from your list. (Some teachers like to write each word on a slip of paper and draw them from a hat.) Have your students use different symbols for each game you play, rather than taking time to make markers. Use hearts, stars, triangles, squares, circles, check marks, etc. A PORT! occurs when a student gets four words in a row.
5. For the final game, do a blackout round. This means every square is called.

Enjoy!

HOW TO USE THE SEATTLE SEAPORT FACT SHEET

Grades: 8-12

EALR's: Art: 1.1, 1.3, 1.4

Communication: 1.1, 1.2, 1.3, 2.1, 2.2,
2.3, 2.4, 2.5, 3.2, 3.3, 4.3, 4.4

Math: 1.1, 1.2, 1.4, 2.1, 3.1, 3.2, 3.3,
4.1, 4.2, 4.3

Writing: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4

SS-Civics: 1.3, 3.1, 4.3

SS-Economics: 1.1, 1.2, 1.3, 1.4, 1.5

SS-Geography: 1.1, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3

SS-History: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.3

WHAT IS THIS LESSON ABOUT?

There are many ways to use the fact sheet provided by the Port of Seattle in your folder. The following is a list of applications intended to provide some ideas which you may find worthwhile for your class. Student activity sheets and detailed plans are not included.

MATERIALS

One copy of the Seattle Seaport fact sheet for every student.

HOW ARE WE GOING TO DO IT?

1. Using the fact sheet, the students could:
2. Design a brochure for an advertising campaign promoting the Port of Seattle seaport.
3. Develop a storyboard (six to eight small graphics) disseminating information about the Port.
4. Prepare a two minute speech for the Chamber of Commerce about the Port.
5. Graph information about economic benefits, imports/exports or facilities.
6. Develop a 30-second commercial spot informing the public about the benefits of the Port.
7. Plan a panel discussion in which two students play the part of citizens who are in favor of expanding the Port and two who are against such expansion. Give points when a side uses information from the fact sheet to substantiate their position.
8. Draw a Pacific Rim map indicating trade routes.
9. Draw a U.S. map indicating major delivery destinations.
10. "Put the Port in Your Pocket" by designing a pocket sized memento which gives a sense of the importance the Port of Seattle plays in King County's economic vitality.

THE SEATTLE SEAPORT FACT SHEET

The Port of Seattle is a public enterprise with unique authority in an international, market-driven environment. The Port provides services to its customers in order to return benefits to the citizens of King County, giving careful consideration to the economic, social, and environmental impacts of its decisions.

In addition to Seattle-Tacoma International Airport, the Port of Seattle operates the West Coast's most diverse seaport, including container terminals and other cargo handling facilities; Fishermen's Terminal, home to the North Pacific fishing fleet; five recreational marinas; an international conference center and World Trade Center, and two Cruise Terminals.

- Port of Seattle conducts two-way trade worth nearly \$29 billion.
- Seattle is a full sailing day closer to major Asian markets than other U.S. ports. Seattle is equidistant by air from Asia and Europe (approximately nine hours).
- Port of Seattle is the seventh largest North American container port (1.44 million TEUs in 2002) and 42nd largest in the world. When combined with the Port of Tacoma, we are 3rd largest container load center in North America and among the top twenty in the world.
- Seattle-Tacoma International Airport is the eighth fastest growing major airport in the world in passenger volume. Sea-Tac Airport handled nearly 26.8 million passengers and air cargo at 457,000 metric tons per year on average.
- Sea-Tac Airport served 26.8 million passengers in 2002, compared to about 18 million passengers in 1993. Domestic travel was up 6.6%, and international traffic increased by 13.1%.
- In 1999, more than \$9 billion in air cargo commodities were traded at Sea-Tac Airport. In terms of dollar value, the number one export was aircraft equipment valued at \$710 million. In terms of weight, computer peripherals (mouse, speakers, zip drives) and deciduous tree fruit (apples, pears, cherries, etc.) were first and second respectively in exports.
- Port of Seattle employs 1,700 people and supports more than 26,000 jobs in the region. An additional 64,000 visitor industry jobs rely on Sea-Tac Airport.
- Port of Seattle's top waterborne trading partners by dollar value are Japan, China, South Korea, Taiwan, and the Philippines. About 70% of Seattle's inbound waterborne cargo is destined for inland markets.

THE SEATTLE SEAPORT FACT SHEET

Continued

- Port of Seattle **Sister-Port Relationships**: Kobe, Japan; Rotterdam, The Netherlands; Fremantle, Australia. Port of Seattle **Friendship-Port Relationships**: Shanghai, China; Pusan, Korea; Singapore; Miyagi Prefecture, Japan; Vostochny, Russia; Qingdao, China; Tanjung Perak, Indonesia, and Taichung, Taiwan.
- The Port of Seattle's **top imports** by sea and air are: apparel; office and data processing machines/parts; motor vehicle parts; electronics/electrical parts/equipment, games and video games, and footwear. POS's **top exports** are: beef, pork, poultry, inorganic chemicals, industrial equipment, oilseeds and frozen fish.
- Washington State's top five **exports** are: forest products, agricultural produce, electronic and scientific equipment, aircraft parts, software. Total exports: \$42 billion
- Washington State's top five **imports** are: forest products, motor vehicles, aircraft engines, motor vehicle parts and petroleum gas. Total imports: \$65 billion

ECONOMIC OVERVIEW

- Washington State conducts more international trade than any other state on a per capita basis. One in every four jobs is tied to trade.
- Washington State is the fourth largest exporting state in the U.S. ranked by volume after California, Texas and New York respectively.
- Average wage supported by seaport operations, more than \$48,000 per year, is well above the King County-wide average.
- Business revenues for the Port's Seaport cargo and vessel handling terminals exceeds \$12 billion annually.
- Net cash provided by Port operations rose to \$112.6 million – up 15.6 percent from 1998.
- The capital budget 2002 was \$471.8 million, a 14-percent increase over that in 1999. This includes part of a five-year, \$3 billion capital improvement plan for Sea-Tac Airport.

SEA-AIR, A PORT PARTNERSHIP

Grades: 9-12

EALR's: Communication: 1.1, 1.2, 1.3,

Math: 4.1, 4.2, 4.3

SS-Economics: 1.1, 1.2, 1.5

SS-Geography: 1.1, 2.3, 3.1, 3.2, 3.3

SS-History: 1.2, 1.3, 2.1, 2.2, 2.3, 3.3

WHAT IS THIS LESSON ABOUT?

The Port of Seattle developed the Sea-Air cargo concept in the 1980s. Sea-Air cargo is a combination of using the inexpensive but slow sea transport of freight with the very expensive but timely movement by air. Seattle's unique geographic location in relation to the Pacific East plus energetic marketing has resulted in an increasingly larger profit for both the port and the merchandiser.

This activity is designed to stimulate creativity based on fact and group cooperation. It is recommended that class time be given for organizing and shaping the assignment. It is also recommended that you invite a guest to play the role of the merchandiser.

MATERIALS

One copy of the student activity sheet for each student. Art materials for creating posters, charts and graphs; globes, atlases, access to the school library and the internet.

HOW ARE WE GOING TO DO IT?

1. Divide your class into groups. Five is the largest recommended, three the smallest.
2. Go over the directions and the facts, discussing questions and concerns.
3. Set ground rules and deadlines.
4. Invite guest "merchandiser." You could have a different person each day.
5. Set presentation schedule.
6. Present and evaluate.

SEA-AIR, A PORT PARTNERSHIP

Student Worksheet

NAME _____

Using the following facts, prepare a marketing presentation to “sell” a clothing merchandiser who has clothing constructed in Asia and sells it in the United States, Canada, and Europe on using the Sea-Air program developed by the Port of Seattle. The presentation must consist of at least:

- (1) one chart or graph
- (2) one full color poster emphasizing the Port of Seattle’s services and benefits
- (3) a hypothetical budget document and
- (4) a verbal presentation in which at least three people speak.

Other materials and aids may be used. The presentation time is limited to ten minutes. You are expected to dress and behave professionally for your presentation.

- A ship takes 20 to 25 days to get from Japan to Europe.
- Shipping rates from Japan to Europe are approximately 15 cents a kilo.
- Air rates are about \$3.00 a kilo.
- Sea-Air is a partnership highly productive to Seattle where freight is shipped from Japan to Seattle and then air freighted on to Europe. This takes from ten to fourteen days transit time. It costs about \$2.00 per kilo.
- Seattle’s Port is 1 1/2 days closer to Pacific Asia than Los Angeles.
- There is less congestion at Sea-Tac Airport than Los Angeles International Airport.
- Cargo can be moved efficiently from seaport terminals to the airport. Cargo can be off-loaded at the waterfront and be loaded onto a Boeing 747 within two hours.
- Container ships arrive steadily from Asia.
- The Sea-Air link was developed in the 1980s in an attempt to lure new airlines to the airport.
- The Japanese zero inventory philosophy of “kanban” contributed to Sea Air’s success. Eliminating high inventory costs by not taking delivery of stock until it is actually needed makes Sea-Air shipping a valuable part of many manufacturers’ planning. Fast growing marketing and distribution systems of Japanese companies in Europe have contributed to Sea-Air’s success.
- Seattle has nearly 100 freight forwarders and custom house brokers.
- Two major European cargo carriers, Cargolux (Luxembourg) and Martinair (Amsterdam), have operations leaving almost daily from Seattle.

SEA-AIR, A PORT PARTNERSHIP

Student Worksheet (Continued)

- British Airways, Northwest, Scandinavian Airlines (SAS), and Aeroflot carry Sea-Air freight to European cities in the bellies of passenger aircraft, which provides more than daily service.
- Sea-Tac Airport bought a main deck cargo loader, the first U.S. airport to have its own. Sea-Tac Airport rents this loader to airlines at a reasonable hourly rate.
- The Port of Seattle offers an efficient interchange of cargo at the waterfront.

WHAT WEST COAST CITY'S AIRPORT AND SEAPORT IS CLOSEST TO ASIA?

The Port of Seattle hopes you enjoyed learning about international trade.

All countries participate in international trade, both exporting to (selling) and importing (buying) goods from other countries. Trade is very important to the United States, to the state of Washington and to Seattle.

Seattle is an important center for world trade since our airport and seaport are located closer to Asia than any other United States port. A ship sailing from Asia reaches Seattle about one day sooner than Los Angeles. By air, Seattle is closer too. Asia is an important trading partner, because Asian countries produce the kind of goods we use every day, such as cars, stereos and clothing. Since Seattle is closer to Asia than any other United States port, companies sending goods to the United States save time and money when they use Seattle as the gateway to the Midwest and East Coast of the United States.

Washington State is the fourth largest exporting state in the U.S. ranked by volume after California, Texas and New York respectively. In Washington, we export everything from apples to airplanes, and we import everything from kiwi fruit to toys. One out of every four jobs here is related to international trade. Airline workers, farmers and restaurant workers are just a few of those whose jobs are connected to international trade. What job would you like to have someday? Will international trade influence your work?



Most of the cargo moving through Seattle by sea and air comes from or goes to the countries and cities shown in this map. The above countries in Asia are the Port of Seattle's top trading partners.