

Education Materials on



Sixth Grade

4 day unit with teacher
resources

Updated 5/09



Explore the Port of Green Bay – the economic artery of our community!

The education materials you are about to review were developed to engage children in thinking about the Port of Green Bay beyond bridges and ships, but rather as a link to the rest of the world. These lessons will give students a comprehensive understanding of the commercial shipping industry and its vital role in our community.

The Port of Green Bay can help you achieve learning that directly fits the Wisconsin standards students are required to meet for fourth and sixth grade. In these materials you will find lessons that engage students in learning about history, geography, mapping skills, ecosystems of the Great Lakes and shipping and commerce. The lessons use a variety of hands-on activities and resources like CD's, books and DVD's to enhance a student's learning.

The Port of Green Bay would like to thank the following organizations and individuals who helped develop and coordinate the fourth and sixth grade materials:

Ashwaubenon School District

*Nicki VanLaanen
Social Studies teacher,
Ashwaubenon High School*

***The Wisconsin Maritime Museum,
Manitowoc***

*Wendy Lutzke, Educator
Norma Bishop, Executive Director*

***The Brown County Port & Solid
Waste Department***



The Port of Green Bay

Educational Unit

6th Grade Level

Purpose:

This educational unit designed for the 6th grade (Wisconsin) was created to provide classroom teachers with information, lesson plans, resources, and ideas for teaching students about the Port of Green Bay. Teachers can use the unit in its entirety or as separate lessons to educate our students about this important economic development in the Green Bay area and Northeast Wisconsin.

The unit fulfills the following Wisconsin Academic Standards and Brown County curriculum including the following Green Bay Area School District 6th Grade Standards and Benchmarks in the area of Social Studies:

6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.6.2, 6.7.1, 6.8.1, 6.9.1

The following is from the port of Green Bay website:

www.portofgreenbay.com and www.harborprosperity.com

Mission:

The mission of the Brown County Port and Solid Waste Department for the Port of Green Bay is to plan and promote harbor improvements to spur the economic development of the Green Bay area and Northeast Wisconsin by stimulating trade and business through safe and cost-effective waterborne transportation activities, while taking into consideration the needs of the community with regards to tourism and recreation.

Vision:

The Port of Green Bay will become increasingly self-sufficient through involvement in port development, real estate and other activities that expand port efforts. The Port of Green Bay will aggressively pursue new business opportunities while continually seeking to build alliances with industry, other waterfront land uses, and all entities of government.

For more information/comments/questions please contact:

Port Manager:

Dean Haen

Telephone:

(920) 492-4950

Location:

2561 S. Broadway
Green Bay WI 54304

Email:

bc_port@co.brown.wi.us

Course 6th Grade Port of Green Bay Unit

Week of (Date) Day One: Based on 50 minutes of instruction

Wisconsin Social Studies Standards : D.8.2, D.8.3, D.8.7

Learner Target(s) Identify important ports and cargoes on the Great Lakes. Determine the economic impact of the Port of Green Bay.

Objective(s) Students will identify geographic areas on a floor map, analyze a recent news article, use charts and figures to identify the economic impact of their local port.

Activities (Evidence of Learning):

Make sure you've reserved the Great Lakes Shipping Education Trunk to use in your classroom from the Port of Green Bay office.

1. Using the Great Lakes Floor Map and geographic labels, have students label the lakes, states/province, and main ports for each state/province using the procedure in the Great Lakes Shipping & Receiving Ports Lesson from the shipping trunk. This will help put the Port of Green Bay into context. (Use **L1A** resources to help.)
2. Brainstorming
 - a. What local industries/companies provide jobs in Green Bay?
 - b. How do they transport goods to market?
 - c. What types of transportation could be used to get goods to market?
 - d. What is the determining factor in deciding which mode of transportation to use?
3. Read the Green Bay Press Gazette Article, "Port's impact on region estimated at \$88 million." (**L1B**)
 - e. Have students read the article and answer questions. Students may work individually or with a partner.
 - f. Discuss the answers to the questions.

Assessment(s)

Teacher observation of class activities
Student participation in discussion
Student completion of answer sheet and puzzle

Materials

1. Distances and Freighter Travel Times sheets (**L1A**)
2. Green Bay Press Gazette article copies and question sheets. (**L1B**)
3. Crossword Puzzle (**L1C**)

Assignment(s)

Fill out the crossword puzzle to review the importance of the Port of Green Bay. (**L1C**)

Reminders

Make sure you've reserved the Great Lakes Shipping Education Trunk to use in your classroom!

Course 6th Grade Port of Green Bay Unit

Week of (Date) Day Two: Based on 50 minutes of instruction

Wisconsin Social Studies Standards: A.8.1, A.8.7

Learner Target(s) Students will identify and analyze the 5 themes of geography. Students will apply the themes to Green Bay and the port.

Objective(s) To learn (or review) the 5 themes of geography and apply them to local geography.

Activities (Evidence of Learning):

1. Have students brainstorm a definition of geography. What is it? Why do we study it? What types of geography are there?
2. View and discuss PowerPoint that defines geography and the five themes of geography. **(L2A)**
3. Take students to computer lab for Internet research using the Port of Green Bay website. www.portofgreenbay.com and www.harborprosperity.com
4. Hand out question sheets **(L2B)** that will direct students as they investigate how the Port of Green Bay is an excellent example of the importance of geography and shipping.
5. Discuss the answers to the questions to check for understanding and application of the 5 themes.
6. Assign the creation of a collage, using the pictures available on the Port of Green Bay website, which illustrates the 5 themes of geography.

Assessment(s)

Teacher observation
Student completion of question sheet
Student participation in discussion
Student collage

Materials

1. Geography PowerPoint **(L2A)**
2. The Port of Green Bay Question sheet **(L2B)**
3. Internet Access

Assignment(s) Collage

Course 6th Grade Port of Green Bay Unit

Week of (Date) Day Three: Based on 50 minutes of instruction

Wisconsin Social Studies Standards: A.8.4, D.4.3, D.4.4, D.4.6, D.8.3, D.8.7, D.8.8

Learner Target(s) Students will learn background information about the Port of Green Bay, past, present and future.

Objective(s) Students will analyze a PowerPoint and answer questions related to the PowerPoint.

Activities (Evidence of Learning):

1. Brainstorm with students and fill out KWL chart (**L3A**);
What do you already **know** about the Port of Green Bay?

What do you **want** to know about the Port of Green Bay?
2. Invite Port Manager, Dean Haen, as a guest speaker. Have Mr. Haen discuss his PowerPoint presentation with the students.
3. Allow students to ask questions about the PowerPoint/Port of Green Bay.
4. To review, have students fill in the "What have you learned?" portion of the KWL chart.
5. To review the major concepts of the PowerPoint, have students get in groups of 4-5 students and fill in the ABC Boxes (**L3B**), filling in something they learned from the PowerPoint for each letter.

Assessment(s)

Teacher observation.

ABC Boxes & KWL charts.

Student participation.

Materials

1. KWL chart (**L3A**)
2. ABC Boxes (**L3B**)

Assignment(s): In preparation for your class visit to the Port of Green Bay, have students write 3-5 questions that they hope to learn the answers for during their visit to the port.

Course: 6th Grade Port of Green Bay Unit

Week of (Date) Day Four: Based on 50 minutes of instruction

Wisconsin Social Studies Standards: D.8.3, D.8.4, D.8.5, D.8.10, D.8.11

Learner Target(s) Students will apply what they have learned in class by fitting it into the context of Great Lakes maritime history.

Objective(s) Students will identify the importance of shipping and the Port of Green Bay within the context of Great Lakes maritime history.

Activities (Evidence of Learning):

1. Wisconsin Maritime Museum Class Visit: Contact Wendy Lutzke, Educator to set up a tour by calling 920-684-0218 or e-mailing wlutzke@wisconsinmaritime.org.
2. Once the date is scheduled, coordinate permission slips and transportation to and from the Museum.
3. Have students bring along the questions they developed in preparation for the visit and complete field notes as they tour the facilities.
4. Upon return to class, discuss field trip and field trip notes.

Assessment(s)

Teacher observation.

Student participation.

Field trip notes.

Materials

1. Transportation
2. Permission slips
3. Field trip note sheets



WISCONSIN
MARITIME
MUSEUM
AT MANITOWOC

School Programs

The Wisconsin Maritime Museum offers a wide variety of quality educational programs for children and schools that are designed by licensed educators, meet state educational standards, and make learning fun!

Our educational staff will work with your group to schedule a museum experience that can include one of our 45-minute educational programs, a tour of the submarine **U.S.S. Cobia**, and guided tours of the Museum. Contact Wendy Lutzke, Educator, at 920-684-0218 ext. 115 or by e-mail, wlutzke@wisconsinmaritime.org to set up a visit!

Below you will find a list of programs that can enhance your unit on the Port of Green Bay. You can ask to include one of these programs during your visit to the Wisconsin Maritime Museum.



Lock Travelers

How do you get a boat or ship to sail over hills or up a waterfall? Learn how engineers used locks to accomplish these feats, and how locks help Great Lakes ships sail all the way from the middle of North America to the Atlantic Ocean. We'll also have a chance to work the hands-on lock system in the Children's Waterways Room.



Shipbuilding on the Great Lakes

From tall ships of wood to modern freighters of steel, we'll learn about the many methods of Great Lakes shipbuilding using a variety of museum exhibits, shipbuilding tools and other hands-on materials. We'll also design and sail our own cargo vessels fully loaded in our Children's Waterways Room.



Gone Missing: Weather & Water's Deadly Mix



Thousands of ships have disappeared on the Great Lakes over the course of the last few hundred years. What caused those shipwrecks to occur? Using the wreck of the *Edmund Fitzgerald* as an example, learn how ship design, storm fronts, and lake bathymetry can all be factors in the tragic loss of ships and people on the Great Lakes.