

# A Sailor's Diet in Weights and Measures

Target Grade Level: 4th-7th

Time for Lesson: 90 minutes

## Overview & Major Themes

Using weights and measures, students compare and contrast an ordinary 1812 sailor's ration to their own daily diets.

Objectives	Outcomes	Materials & Resources
<p>Students will be introduced to volume and weight equivalencies.</p> <p>Students will use a scale and beakers to measure and weigh foods.</p> <p>Students will compare an 1812 naval food ration to their own daily diet.</p>	<p>Students will complete a descriptive essay of their conclusions about a sailor's ration during the War of 1812 compared to their own diet.</p> <p>Students will measure and weigh at least 2-3 goods using volume and weight.</p> <p>Students will complete at least two weight equivalencies.</p> <p>Students will work together in a group of 2 or more to complete an assignment.</p>	<ul style="list-style-type: none"> <li>• A collection of foodstuffs, including several of the following: bread, peas (dried), cheese, rice (dried), molasses, butter, flour, vinegar, something to resemble beef and pork, and a liquid to resemble sailor's grog-whiskey mixed with water.</li> <li>• Cups and Bowls.</li> <li>• 3-7 scales, able to measure in pounds and ounces.</li> <li>• 7 beakers, able to measure in pints.</li> <li>• "1812 Navy Sailor's Weekly Diet Chart"</li> </ul>

Time	Instructional Activity
5 min.	Students view the <i>Dinnertime</i> or <i>Sailors Eating</i> scene on <i>A Sailor's Life for Me</i> (either online or as a print out). Students explore the scenes looking closely at the details.
10 min.	Lead a classroom discussion or a Silent Round Table writing exercise. Lead students with questions like, during the War of 1812, "What do you think sailors ate?" "Did they cook their own food?" and "Do you think sailors had a choice of what to eat?" "What would sailors need in their diet to keep them healthy and give enough energy to complete the difficult work required of them?"

Time	Instructional Activity
2 min.	Split students into seven (7) groups. Each group will be assigned to represent one day of the week (Sunday, Monday, etc.).
2 min.	Hand out or post the “1812 Navy Sailor’s Weekly Diet Chart”.
5 min.	Students discuss (in their groups) their day’s ration of food. Do they know what all their foodstuffs are? (Explain that Suet is beef fat, and was often a cooking ingredient; molasses is a sweet syrup made from sugar cane, somewhat like maple syrup, but a little thicker.) Explain the “bread” sailors ate was not like the soft bread students enjoy today. Sailors’ bread was called Ship’s Biscuit, and was a hard cracker that sailors may have soaked in water or stew to soften.
15 min.	Introduce students to conversions of mass: 16 ounces (oz) equal 1 pound (lb). Introduce students to the conversions of volume: 8 pints (pts) equal 1 gallon. Ask each group to convert ounces to pounds (or pounds to ounces) for their assigned rations. Have students write down their “guess-timation” of how many slices of bread equal 14 ounces, or how much a 1/2 pint of “Spirits” weighs.
30 min.	Use the scale(s) with each group to weigh out and measure their day’s ration. Was any group close to its guess (bread or “Spirits”)?
15 min.	In each group, students tally what they have eaten in the last 24 hours, and then compare the list to what was provided to a sailor daily.
15 min.	Students write a descriptive follow-up paragraph, and answer the following questions: What are the differences between your diet and an 1812 sailor’s? How much or how little does the 1812 sailor eat compared to you? Could you cook a meal using you sailor rations? Why do you think sailors were served these types of foods?
Homework, or follow-up activity	For a follow-up activity, use any of the recipes listed on <i>A Sailors Life for Me Educator Resources</i> (“1812 Hot Chocolate”, “Ship’s Biscuit”, or “Sailor’s Duff”) to treat your students. Use the search feature to find the recipes. Search for and try the “Guess the Ingredient” game where students learn about meals served aboard ship, or for a more in-depth understanding of sailor’s rations, read the “Daily Calorie Intake of 1812 Sailor and a Modern Combat Ration”.

# 1812 Navy Sailor's Weekly Diet Chart

	<b>Beef</b> (lbs)	<b>Pork</b> (lbs)	<b>Flour</b> (lbs)	<b>Suet</b> (lbs)	<b>Bread</b> (oz)	<b>Cheese</b> (oz)	<b>Butter</b> (oz)	<b>Peas</b> (pts)	<b>Rice</b> (pts)	<b>Molasses</b> (pts)	<b>Vinegar</b> (pts)	<b>Spirits</b> (pts)
<b>Sunday</b>	1 ¼		½	¼	14							½
<b>Monday</b>		1			14			½				½
<b>Tuesday</b>	1				14	2						½
<b>Wednesday</b>		1			14				½			½
<b>Thursday</b>	1 ¼		½	¼	14							½
<b>Friday</b>					14	4	2		½	½		½
<b>Saturday</b>		1			14			½			½	½
<b>Total</b>	3 ½	3	1	½	98	6	2	1	1	½	½	3 ½

*A pound is a unit of weight. Sixteen ounces equal one pound. A pint, however, measures volume. Eight pints equal one gallon.*