



# YALE NATIONAL INITIATIVE

*to strengthen teaching in public schools®*

Curriculum Units by Fellows of the National Initiative  
2008 Volume V: Estimation

---

## **Rice to Feed the World- Estimations on Rice Consumption and Production**

Guide for Curriculum Unit 08.05.07, published September 2008  
by Elaine Tam

This is a unit written for 6th grade classes in a Chinese Immersion school in San Francisco. A cooking lesson for the Dragon Boat Festival is the catalyst for this unit. The students explore and synthesize math skills and concepts to make estimations about rice demands and land requirements to produce the rice. There are four sections in this unit. The first part, students will learn about the notation of large numbers. They will build number sense by comparing numbers in terms of the multiplication factors. In the second part, students learn about unit rate and proportions using a variety of units of measurement, including mass, length, area and volume. Students learn to choose the appropriate units of measure and perform unit conversions for the scale of things being measured. In the third section, students explore the relationship between mass, area and volume to find solutions for rice storage. In the last section, students estimate the area of land needed to produce quantities of rice. In a final cumulative unit project, students will define a situation, gather the information they need, calculate the estimates and present their findings to the class.

(Developed for Math, grade 6; recommended for Math, Middle School grades 6-7)

---

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit [https://teachers.yale.edu/terms\\_of\\_use](https://teachers.yale.edu/terms_of_use)