



YALE NATIONAL INITIATIVE

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

Crunching Numbers for Lunch

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This integrated unit teaches explicit estimation skills through examining environmental issues at the school site. The overall goal for the unit is for students to make sense of statistical reporting and very large numbers through evaluating use and waste habits of the school community. By using estimation techniques and manipulating quantities, students will be able to evaluate numbers over 1000. Beyond recognizing large numbers and understanding their value, these techniques will also provide them with the skills necessary to multiply and add large numbers and evaluate their own multiplication and addition processes to see if their solutions are reasonable. Besides merely recognizing and computing large numbers, students will be able to use estimation and relative place value to compute quantities of length, area and volume using various units of measurements. These skills will be applied to a final project in which students design investigations of use and waste in the cafeteria and present their findings using comparative language as well as graphics.

(Developed for Math and Science, grade 4; recommended for General Elementary Math and Science, grade 4)

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