



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
2006 Volume IV: Math in the Beauty and Realization of Architecture

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## **Gingerbread Architecture: An Exploration of Architecture and Engineering**

Guide for Curriculum Unit 06.04.01  
by Jennifer Esty

In this unit students will combine math, technology and art in the creation of gingerbread houses. Students will use math and basic engineering skills to test various gingerbread house building materials for strength and other important building characteristics. Students will also study various building techniques and the materials to which they have been applied throughout human history. Using information gained from these two exercises, students will design and construct gingerbread houses.

This unit will be very good for a class with many different types of learners. It will have strong visual elements to it, but it will also have a very kinesthetic aspect to it as well as spatial and mathematical elements. Because of the many skills required, this unit will lend itself well to a class that can work in small teams. All of the projects involved in this curriculum unit could be accomplished by individuals, but most of them could also be done in small groups or teams.

(Recommended for Science, grade 8.)

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