

# A FOCUS ON MATHEMATICS SEMINAR

## Problem Solving and Problem Posing

Presented by:

**Steve Benson**

Date:

**October 24, 2005**

Place:

**ARLINGTON HIGH SCHOOL**

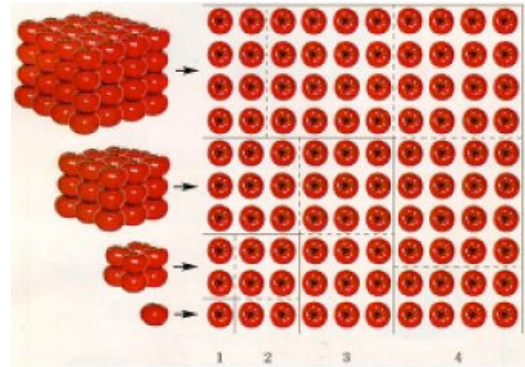
**Library**

**869 Massachusetts Ave.**

**ARLINGTON**

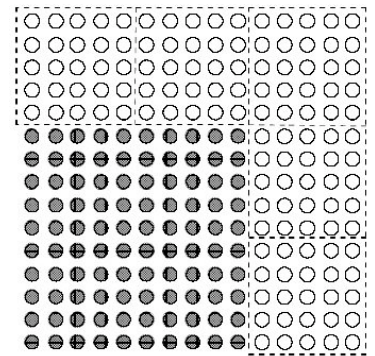
Time:

**3:00 – 6:00 PM**



PROOF BY TOMATOES?

**Habits of Mind**  
Conjecture  
What if...?  
What if not?



$$1^3 + 2^3 + 3^3 + 4^3 + 5^3 = (1 + 2 + 3 + 4 + 5)^2$$

Which counting numbers are equal to the sum of two or more consecutive counting numbers? We will mine this question for mathematical connections that span grade levels, then pursue related problems. While this seminar is designed for teachers to engage in exploratory mathematics, the content can be adapted for use with students.

**Teachers of all grade levels are invited!**

**DEADLINE FOR REGISTRATION IS OCTOBER 20, BUT SPACES WILL BE FILLED ON A FIRST COME BASIS. PLEASE CONTACT YOUR DISTRICT LEADER FOR REGISTRATION. MORE INFORMATION AND DIRECTIONS TO ARLINGTON HIGH SCHOOL CAN BE FOUND AT [WWW.FOCUSONMATH.ORG](http://WWW.FOCUSONMATH.ORG).**



**REFRESHMENTS WILL BE SERVED FROM 3:00 TO 3:20.  
THE SEMINAR WILL BEGIN PROMPTLY AT 3:30.**

*Focus on Mathematics* is a unique partnership of mathematicians and educators from Boston University, Education Development Center, Inc., Worcester Polytechnic Institute, UMass Lowell, Lesley University, and five Greater Boston school districts: Arlington, Chelsea, Lawrence, Waltham, and Watertown.



Funded by the National Science Foundation under grant EHR 0314692