## 1035-R1-1619 Brian P. Kelly\* (bkelly@bryant.edu), Bryant University, 1150 Douglas Pike, Smithfield, RI 02917. Strong Induction.

In this presentation, we will describe in-class activities which motivate and illustrate the Strong Principle of Mathematical Induction. The first "informal" example serves to prompt the students to recognize limitations in applying the Principle of Mathematical Induction. In particular, we look at counting the number of steps required to complete separate the squares of a chocolate bars. Then, we discuss the manner in which our other examples provide students with the means to recognize problems amenable to solution by Strong Induction. We finish with a discussion of transitioning students from "informal" to "formal" thinking. (Received September 20, 2007)