

1014-S1-1624 **Mika Munakata*** (munakatam@mail.montclair.edu), Richardson 211, 1 Normal Avenue, Montclair, NJ 07043, and **Michael A. Jones** (jonesm@mail.montclair.edu), Richardson 206, 1 Normal Avenue, Montclair, NJ 07043. *Using the "Color the Board" game to challenge anxious students' notions of mathematics.* Preliminary report.

For the "color the board" activity, which was adapted from a game for middle school classes, students are challenged to determine the coloring of a 10 x 10 board, given the restrictions that all 100 unit squares have been colored in one of four colors and that each color forms exactly one contiguous rectangular region. One by one, students ask for ("guess") individual squares to be revealed. The instructor reveals the colors of each requested square on an overhead transparency. The objective of the activity is for the class to determine the coloring of the board in as few guesses as possible. This activity is especially suitable for courses that include students who are anxious about mathematics. In particular, it challenges students' notions of the skills necessary in the field. While numbers appear in the ordered pairs that are used to identify the squares, students do not compute, calculate, or apply formulae-tasks that are often associated with mathematics. Instead, they use logical reasoning and geometric properties to develop and articulate suitable strategies. Furthermore, the game-like aspect of the activity is appealing to students and provides an atmosphere that is non-threatening. Some extensions related to counting, geometry, and logical reasoning will be presented. (Received September 28, 2005)