

1116-J5-1330 **Forest Fisher** and **Jared Warner*** (jared.warner@guttman.cuny.edu). *“Build a City...” - exploring ratio and density through an urban planning board game.* Preliminary report.

In the context of a quantitative reasoning section of a multi-disciplinary course focused on the gentrification of New York City, we designed a board game to give students the opportunity to explore the concepts of ratio and density. “Build a City...” is a multi-player game with simple rules to be implemented in class in groups of 3-5 students. In the game, students assume the role of urban planner, and are asked to design cities (using a number of different “city pieces”) that satisfy certain ratio and density requirements. With multiple levels of difficulty, and flexible city pieces and ratio requirements, this game could be adapted for many different levels of K–16 curriculum. In this talk, after describing the simple rules of the game, we’ll have the audience play one round in small groups. We’ll finish by discussing our experience in implementing the game in the classroom, highlighting potential challenges and helpful group discussion topics to address in class. (Received September 18, 2015)