Engaging students has become increasingly difficult in our fast-paced, distracting world. Traditional style lecture or traditional group work can only go so far in reaching students. In this session, we will explore two games/puzzles in which students physically work through a solution to a mathematical task (hidden as a game) and use this experience to analyze their thinking processes. Posing critical thinking problems as physical tasks allows students to engage in the concrete and bridge to the abstract. These student-centered activities meet the needs of diverse learners, encourage perseverance through difficulty, and challenge students to put into action their critical thinking strategies. This style of engagement also requires students to develop their communication skills, both verbal and written. With correct facilitation, pre-service teachers begin to think like educators and are naturally engaged in many of the NCTM process standards. (Received September 20, 2011)