Name/Title: Math Movers

Purpose of Event: Students will learn to solve math-related problems and equations while on the move. This is a cooperative activity in which partners must communicate effectively (using a two-person, fast paced format) to position number cards (retrieved from either the center of the room or far side of the room depending on set up) on a math "scorecard" (attached) positioned at each pair's "home base."

Prerequisites: Before beginning this lesson students must be able to perform basic locomotor skills. Also, students should have had exposure to the corresponding math topics during classroom instruction.

Suggested Grade Level: 3-5

Materials Needed: (For 24 students): 12 cones for starting at a homebase, 12 math "scorecards" (with grade-level specific problems), 2 folding mats placed flat on floor, pedometers (if available), music, and several hundred number cards (we use "Skip-Bo" cards bought at Target). Note: I created my own cards for this submission to avoid copyright issues.

Third Grade Template
Completed Third Grade Scorecard

Description of Idea

Players form pairs and share one math "scorecard." On the "go" signal, one player at a time starts at their home base jogging quickly to the other end of the room to retrieve one number card from the hundreds placed face down on two large folding mats. No peeking! Upon returning to their home base the card is strategically placed face up on the scorecard. It is common for players to move these cards multiple times on their scorecard during the game for the best possible use of number combinations as more cards are added. Waiting is replaced in this fast-paced game by engaging students cognitively in solving math equations and creating appropriate numbered patterns while a partner is retrieving the next card.

Typically, pairs will retrieve number cards that do not fit well on their scorecards as it begins to fill up. Thus, a "trading place" is created (also located far away promoting movement using a hula hoop and five number cards placed face up inside)that students may travel to and exchange unused cards with a more compatible one that can help pairs complete the assigned task. Students are reminded that the "trading place" is a place of exchange (one for one) and not a dumping ground for unwanted cards.

This game is continuous in nature. First place, etc., is never announced publicly. When groups feel their scorecard is completed accurately they signal for the teacher to check their work. At this point, the teacher either makes suggested changes or congratulates the group, asks them to

return their cards to the mats and they begin again.

Thus, the challenge becomes how many times you can move quickly, complete your scorecard, and enjoy the challenge.

Note: The scorecards are templates that have answer examples provided. Players do not have to match their number cards exactly to the numbers written on the templates. A third-grade template and completed scorecard are provided with this lesson idea.

Variations: (1) locomotor variations, (2) riding scooters, and (3) introduce new templates after periods of play to keep the game fresh.

Final thought: Worried about waiting? Recently one of our third grade classes used pedometers during this lesson. These 17 students averaged a total of 1,535 steps each and the entire class totaled 8.5 miles in 30 minutes. Suggested game time is approximately 20 minutes due to fatigue.

Assessment Ideas:

The use of scorecards IS the assessment for this lesson. Scorecards were developed using released test information from Virginia's Standards of Learning math tests. Completed scorecards will show if students understand numbers and number sense, measurement, computation and estimation, and probability and statistics.

Adaptations for Students with Disabilities:

Students with disabilities can move shorter distances to retrieve number cards (start closer to the mat) if needed or go every other turn to engage cognitively more often in solving the scorecard challenge if movement limitation is a critical issue for the student.

Submitted by **Steve Shelton** who teaches at Christiansburg Elementary School in Christiansburg, VA. Thanks for contributing to PE Central! **Posted on PEC: 2/1/2012**.