Points on a Line

Introduction: Students in the second grade are expected to know that numbers can be represented by points on a line. This activity is designed to give students some practice in locating points on a line. The students will like the action in this relay-type lesson.

Grade Level and Subject: Second Grade Math and P.E.

TEKS: Math 8
P.E. 1D, 3A, 3B, 7A

Materials: 4–6 pieces of rope (each at least 6 feet long) or yarn, 40–60 handkerchiefs or strips of cloth, chalk

Activity: The teacher will begin the lesson by introducing the number line in the classroom. He or she will describe the number line and how the numbers each have a sequenced location on the line. Students will draw number lines and practice plotting numbers on the line before participating in the outdoor activity.

Before students participate in the outdoor activity, the teacher will need to prepare the number lines that will be used during the activity. For each piece of rope or yarn, the teacher will need to tie the handkerchiefs or strips of cloth on the rope or yarn. Each number line (rope or yarn) should have 10 pieces of cloth loosely tied to it in an evenly spaced sequence. The number lines should look very similar to each other in both length and the spacing of the handkerchiefs or strips of cloth.

Once the number lines are ready, the teacher and the class should proceed to the playground or the gym. The teacher should attach the number lines to the walls of the gym or to the fence surrounding the playground. Each number line should be the same height from the floor or ground (depending on the average height of the students) and should be spaced about 3–5 feet from the other number lines. The teacher should draw a start/finish line about 20–30 feet away from the number lines. This chalk line should be approximately 25–30 feet in length.

The class should be divided evenly into teams, with preferably 4–6 students on each team. The team members should line up one behind the other, and there should be approximately 4–6 feet in between each team. The first member of each team should line up by standing directly behind the chalk line drawn by the teacher.

The teacher should position himself or herself in a location in which he or she can be heard by all students. The teacher will begin the activity by calling out a number from 1 to 10. The first student of each team (the student standing at the chalk line) will run to their number line, untie and grab the handkerchief or strip of cloth that corresponds to the number called out by the teacher, and run back to the start/finish line. The students will accumulate points based on their
placement when they cross the finish line. For example, the teacher can decide to award 5 points to the first and second place finishers, 3 points to the third and fourth place finishers, and 1 point to the rest of the finishers.

Once the points have been established, the students with the strips of cloth will run back to the number line and place the strip of cloth back in its proper position. Those students will then run back to the line and place themselves at the end of the line. The activity will continue until all students have had at least one time to run to the number line and bring back the strip of cloth that corresponds to the correct number called by the teacher.

As an option, the teacher can vary the locomotive skills used by the students as they retrieve their strips of cloth. Examples of these skills include walking, running, skipping, hopping, galloping, etc.

**Evaluation:** The teacher will observe which students, if any, are confused as to which strip of cloth they need to bring back to the line. Additional instruction should be given to those students in the classroom setting.