Richard Bierer

Elementary Coordinate Geometry Activity

LPSD Standards:

MA 00. 01.01,02 04. 01.01

10.03 10.01

13.01 05. 01.01

01. 01.01 13.01

10.02,03 06. 01.01

13.01,02 13.01

02. 01.01

10.03,04

11.01

03. 01.01

10.01,02

Materials:

* Whiteboard/Chalkboard/Smartboard
* Coordinate grid
* Pencil/Colored Pencils/Crayons
* Coordinates
* Ruler/Straight Edge

Procedure:

Begin class by explaining to the student they will be working on a coordinate grid. For vocabulary reference, cross fingers and have the students do the same while saying the term. Now, introduce the term ordered pair to the student. Cup your hands like parenthesis when you say the term and have the students do the same. Next, introduce the origin. Make circles with each had to imitate zeros for this term and have the students do the same. Finally, go over the directions right and up. Have students point in these directions when you say the terms. Review the vocabulary using the hand gestures and oral words. After the students have a good grasp on the vocabulary, pass out a coordinate grid to each student. Have the origin highlighted or circled in a different color so it is easily recognizable by the students. Have the student locate the origin. Now pass out the ordered pair directions. On the directions, have student write an ordered pair similar to this (right, up). You may add in that these are positive numbers and that is why we are going in those directions. Now, have student watch you exemplify the first direction. Put your finger on the origin and count to the right the first number in the ordered pair. Followed by counting up the second number of the ordered pair. After you have shown the students, have them show you the proper way to count. Have them keep their fingers on the point until you are able to check and see if it is in the right place. Now, have them draw a point (dot) on that place. Let them continue the directions and explain that they need to stop when they get to the stop sign. Have them give you a thumbs up when they are ready. Now that they are at the stop sign, have the students get their rulers/straight edges out and start from the first dot and connect the dots in order. Exemplify on the whiteboard. After they have completed drawing the lines. Have them continue with the directions and tell them to repeat that process every time they get to a stop sign. Upon completion, they should have a picture. Allow them to color the picture however they want and present it in the class.