

Integers

Lesson 3: The Coordinate Plane

Introduction:

This lesson is designed for a sixth grade class of 26-30 students.

Materials Needed:

- Overhead projector
- 14 large maps of MSU campus
- 14 worksheets asking one to find places on the MSU map
- 30 battleship worksheets

Goals:

- Use the coordinate plane concept (only quadrant I).
- Find an ordered pair on a coordinate plane (only in quadrant I).

Setting:

Students will be grouped according to the table that they normally sit at. The students will work in pairs with the student sitting across from them.

Teaching The Lesson:

- Introduce the idea of a map as a coordinate plan by drawing a picture of one on the overhead projector.
- Show the students what an ordered pair is and create a discussion of the reasons for having them.
- Pass out the large maps of the MSU campus along with the worksheet that goes with it. Have the students form into pairs start working on the map. As the students work on the map move around the class and help any that need help. The students will be finding places on the map and writing down the coordinates or using coordinates to find places on the map.
- After the students have finished with this activity, move on the battleship. Have the students stay in their pairs and quickly explain how battleship is played. The students will then have the remainder of the time left to play battleship.

Evaluating The Lesson:

This lesson on the coordinate plane went very well. The students really enjoyed the use of the maps and games to guide their understanding of the coordinate plane. The students had a bit of trouble starting to play battleship because I assumed most already knew how to play when actually a bunch had never played it before. This would be something worth taking a few more minutes to explain.

The lesson was a success in my eyes since as I was able to walk around and guide each of the groups as they were working I got to see that the students were doing quite well. Most students easily picked up on the idea of a map using coordinates in order to locate places. It didn't seem like a new concept to most of the children.

Reactions:

The students during this lesson were actively involved in learning almost the entire lesson. Since the students were put into groups they were in charge of their own learning. They had to work together and teach each other how to use the coordinate plane. This way of helping the students to teach one another greatly helps in the understanding of the learned material.

The manipulatives used were necessary to the proper understanding of the concept and I feel that the students appreciated the real-world application. The game and especially the maps provided excellent means for students to see how these skills relate to what they know and will help them in the future.