

# Programming & coordinate Plane

**Grade level:** Fifth grade

**Curriculum Topic:** Math, first quadrant of the coordinate plane.

AR.Math.Content.5.OA.B.3, Using the terms created, form and graph ordered pairs in the first quadrant of the coordinate plane

**Tools:** Sphero and Google Sheets to enhance learning.

**Synopsis:** I will provide multiple enlarged grid posters to represent the first quadrant of the coordinate plane. The students will use their knowledge of the coordinate plane and their problem solving skills, to program Sphero to move to the assigned points. I will give the student access to the class's spreadsheet on Google Sheets. The spreadsheet will have each group's name and all the assigned points. The class will be divided into groups. Each group will have a name and will be made up of three students. Each group will work independently and will be given coordinates of five points, a first quadrant poster on the ground, access to the class's spreadsheet, a stop watch, and a Sphero. Students will take the first point and record the time needed to program Sphero and actually make it go to the assigned point. They will use the spreadsheets to record and share that time. They will repeat these steps for all the given points. At the end, I will use the spreadsheet on the projector so that all the students could see which team took the least time to go to all the points.

