

## Mini-Lesson: Coordinate Plane

- 1. Grade Level:** 5<sup>th</sup>
- 2. Curriculum Topic:** Geometry: AR.Math.Content.5.G.A.2:
  - Represent real world and mathematical problems by graphing points in the first quadrant and on the non-negative x- and y-axes of the coordinate plane
  - Interpret coordinate values of points in the context of the situation
- 3. Tools:** Bee-Bot & Desmos Online Coordinate Plane
- 4. Synopsis:** This lesson will use Bee-Bot and Desmos Online Coordinate Plane to help students understand how to use a coordinate plane to solve real world problems. To begin, I will review the aspects of the coordinate plane, such as: X values, Y values, and how to read the coordinate plane. Then I will split the students into their groups. The students will be split into groups of 4. Half of the groups will work with the Bee-Bot and the coordinate plane I have made on the floor with tape, and the other half of the groups will work with the Desmos Online Coordinate Plane. In the Bee-Bot groups, the students will be given scenarios that they will have to use the coordinate plane to solve. This will involve the students having to program the Bee-Bot to go to a specific location, or XY pair, and then recording the X and Y coordinates for the location. For the Desmos groups, the students will create a city map on the online coordinate plan. They will create points on the plane, give the points names like “city hall” and label the location of their points on the coordinate plane. In this lesson, students will gain a better understanding of the fundamentals of the coordinate plane.