Coordinate Plane STEM Garden PBL

H. Geometry

Geometry Standards:

MGSE9-12.G.MG.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

Mathematical Practice: Attend to Precision.

Ask – How can we design a scaled typographical gride system model of the STEM Garden using the concept of coordinate planes to satisfy optimal utilization of the STEM Garden to further develop its sustainability?

Research –

* Initial Measurements should include the perimeter of the STEM Garden to determine acceptable units for scale.
* Use the determined scale to plot components of the STEM Garden.
* Determine unit of the STEM lab aquaponics plant bed. Choose the best position in the STEM Garden to build and place an identical plant bed. Plot this in your model.



A team of STEM Teachers will determine the best model to have blown up for use in the STEM Lab for future garden modifications.