Objective

By the end of this lesson, you will be able to plot x and y coordinates on a graph.

Materials and Prep

- Paper
- Pencil
- Ruler

No prior knowledge is required for this lesson.

Activities

- **Activity 1: Coordinate Grid**

  Draw a coordinate grid on a piece of paper. Label the x-axis and y-axis. Practice plotting points by randomly selecting x and y coordinates, and marking them on the grid.

- **Activity 2: Connect the Dots**

  Using the points you plotted in Activity 1, connect the dots to form a shape or pattern. Be creative!

- **Activity 3: Mystery Picture**

  Ask a friend or family member to provide you with a list of x and y coordinates. Without seeing the actual picture, plot the points on the grid and try to guess what the picture might be. Once you've made your guess, reveal the actual picture and compare.

Talking Points

- **What is a coordinate grid?**

  A coordinate grid is a system used to locate points in a two-dimensional space. It consists of two perpendicular lines, the x-axis and y-axis, which intersect at the origin (0, 0).

- **How do we plot points on a coordinate grid?**

  To plot a point, we need an x-coordinate and a y-coordinate. We start at the origin and move horizontally along the x-axis to the desired x-coordinate, then vertically along the y-axis to the desired y-coordinate. We mark the point where the two lines intersect.

- **What can we do with plotted points?**

  Once we have plotted points, we can connect them to form shapes, patterns, or even pictures. We

can also analyze the relationship between the points and explore concepts such as distance, slope, and symmetry.