



Coordinate System and Axes

Today's Standard

5.G.A1 - Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

Cues	Notes
What is a coordinate system?	A coordinate system uses perpendicular number lines, called axes, to define positions on a plane.
How do you plot points?	Points are plotted using ordered pairs (x, y) where x is the position along the x-axis and y is the position along the y-axis.
What are the x-axis and y-axis?	The x-axis is the horizontal line, and the y-axis is the vertical line.
Why does the order of coordinates matter?	The order of coordinates matters because the first number indicates the position along the x-axis and the second along the y-axis.
What are common misconceptions?	Common misconceptions include thinking the order of coordinates doesn't matter and that both coordinates refer to the same axis.

Summary

Understanding the coordinate system involves learning how to use perpendicular axes to plot points using ordered pairs. The order of coordinates is crucial, and students must distinguish between the x-axis and y-axis to avoid common misconceptions.