## Coordinate Plane Guided Notes

> the horizontal line on a coordinate plane where points are plotted moving left and right.
$\qquad$ the vertical line on a coordinate plane where points are plotted moving up and down.
$\qquad$ a point identified by an $x$ and $y$ coordinate as a pair.
$\qquad$ the four sections of the coordinate plane divided by the $x$ and $y$ axis.
$\qquad$ the point at the center of the coordinate plane noted as $(0,0)$.

## Plot <br> Quadrant

A $(3,3)$
B $(-3,-3)$
C ( $5,-5$ )
$\qquad$

D $(-5,5)$
E ( $0,-2$ )
F $(2,0)$


Coordinate Plane Guided Notes (Key) Discuss the following terms and mark them on the plane below.

X-axis (mark on coordinate plane below. Draw as a man running across the line, remind them you walk into a building first before going up or down the elevator) the horizontal line on a coordinate plane where points are plotted moving left and right. Y -axis (mark on the coordinate plane below. Draw an uppercase Y on top of the plane, it's tail will create the axis. Remind students that you go into a building first, before going up or down the elevator) the vertical line on a coordinate plane where points are plotted moving up and down.
Ordered Pair (the $x$ and the $y$ are always in alphabetical order "ORDER matters" for the Ordered Pair) a point identified by an x and y coordinate as a pair.
Quadrant (drawing a uppercase C on the coordinate plane reveals where to start labeling with roman numeral I and continue around to roman numeral IV) the four sections of the coordinate plane divided by the x and y axis. Label below Origin (turn the $(0,0)$ into a picture of an owl..." O " for owl and " O " for origin) the point at the center of the coordinate plane noted as $(0,0)$. Label below

## Plot <br> Quadrant

A $(3,3)$
I
B ( $-3,-3$ )
III
C $(5,-5)$
IV
D ( $-5,5$ )
II
E ( $0,-2$ )
on the $y$ axis
F $(2,0)$
on the $x$ axis


## Coordinate Plane Foldable Lesson

Objective: Review terms and components of the coordinate plane. Label and list terms previously learned. Plot points through guided and independent practice.

1. Take a colored sheet and fold into the middle. Cut sides to create a window pane.
2. On the interior of the window, behind the flaps, glue graph paper.
3. Draw the $x$ and $y$ axis on the graph paper.
4. Label the quadrants on the front window flaps.
5. With a highlighter draw the " $C$ " on the front cover to demonstrate how to remember the correct quadrants.
6. Plot ordered pairs together for guided practice
7. Have students plot several given ordered pairs on their own
8. Glue into interactive notebook


## Coordinate Plane Drawing Lesson

Objective: To follow and plot ordered pairs onto a coordinate plane, using graph paper.

1. Plot the ordered pairs listed below.
2. Begin at start. Connect all points until a student arrives at STOP.
3. When student arrives at word STOP, they should pick up their pencil.
4. When completed, students should list and plot a minimum of 10 additional ordered pairs that enhance the image.
5. Then Color!


## Coordinate Plane Drawing Project

Plot the ordered pairs below, connect each dot. When you come to a STOP, pick up your pencil and move to the next point. When completed, plot at LEAST 10 more ordered pairs to enhance the image. List these new coordinates and when to stop below.

START
$(8,0)$
$(8,8)$
$(0,14)$
$(-8,8)$
$(-8,0)$
$(-8,-7)$
$(8,-7)$
$(8,0)$

STOP
$(-6,-7)$
$(-6,3)$
$(-2,3)$
$(-2,-7)$

STOP
$(5,6)$
$(5,2)$

STOP
$(-6,-7)$
$(-11,-11)$
$(-14,-12)$

## STOP

$(-2,-7)$
$(-7,-15)$
$(-14,-21)$

Continue with your ordered pairs.....

