ORDERED PAIR

(Location of specific points and ex. directions from classroom to gym)
Standard: 3.G.2.2 and 2.1

Use ordered pairs to graph, locate specific points, create paths, and measure distances within a coordinate grid system. (Describe location (e.g., directions from classroom to gym).

Concept Skill:
Ordered Pairs

An ordered pair is a pair of numbers used to locate a point.

A coordinate grid is a grid formed by a horizontal line, called the x-axis, and a vertical line, called the y-axis.

![Coordinate Grid](image)

The numbers on a coordinate grid are used to locate points. Each point can be identified by an ordered pair of numbers; that is, a number on the x-axis called an x-coordinate, (left to right) and a number on the y-axis called a y-coordinate, (bottom to top). Ordered pairs are written in parentheses (x-coordinate, y-coordinate). The origin is located at (0,0). Note that there is no space after the comma.
**For example:**

The location of (2,5) is shown on the coordinate grid below. The $x$-coordinate is 2. The $y$-coordinate is 5. To locate (2,5), move 2 units to the right on the $x$-axis and 5 units up on the $y$-axis.

The order in which you write $x$- and $y$-coordinates in an ordered pair is very important. The $x$-coordinate always comes first, followed by the $y$-coordinate. As you can see in the coordinate grid below, the ordered pairs (3,4) and (4,3) refer to two different points!
Example 1:

Which ordered pair names Kyle’s House?

Step 1: Count how many spaces to your point going horizontally.
(Move 2 units to the right. The X-coordinate will be 2).

Step 2: Count how many spaces to your point going vertically.
(Move 4 units up. The Y-coordinate will be 4).

Step 3: What is your ordered pair?
(The ordered pair is \((2,4)\).)
“Student Practice Materials”
Louie wakes up early and decides he wants to go down to the Duck Pond.

The grid above shows Kyle’s House and the Duck Pond. Each box in the grid represents 1 block. If Louie goes to the Duck Pond, how many blocks will it take him to get there?

Show and explain your work.
Coordinate Grid - Ordered Pairs

Tell what point is located at each ordered pair.

1. (3,1)   2. (7,8)   
3. (1,4)   4. (5,0)   
5. (8,7)   6. (4,2)   
7. (5,5)   8. (1,3)   

Write the ordered pair for each given point.

12. O  13. Q  

Plot the following points on the coordinate grid.

14. B (2,8)  15. E (0,7)  16. X (6,3)  

20. Start at point (0,0). Go right three spaces. Then, go up seven spaces. What point do you land on?  
21. Start at point C. Go right seven spaces. Then, go down one space. What point do you land on?
Write the ordered pair for each of the objects listed.

**Example:** television - (7,3)

a. helicopter - (___________)
b. shoes - (___________)
c. pepper - (___________)
d. wizard's hat - (___________)
e. fish - (___________)
f. golf cart - (___________)

tell which object is located at each point.

e. (3,4) - (___________)
f. (2,6) - (___________)
g. (1,4) - (___________)
h. (5,5) - (___________)
i. (9,8) - (___________)
j. (3,9) - (___________)
“KEY”

Louie wakes up early and decides he wants to go down to the Duck Pond.

The grid above shows Kyle’s House and the Duck Pond. Each box in the grid represents 1 block. If Louie goes to the Duck Pond, how many blocks will it take him to get there?

Show and explain your work.

It will take Kyle 6 blocks to get from his house to the pond.

Answers may vary since there is more than one way to get from his house to the pond.
"KEY"

Coordinate Grid - Ordered Pairs

Tell what point is located at each ordered pair.

1. (3,1)  F  2. (7,8)  H
3. (1,4)  M  4. (5,0)  R
5. (8,7)  A  6. (4,2)  D
7. (5,5)  J  8. (1,3)  C

Write the ordered pair for each given point.

12. O  (4,1)  13. Q  (0,0)

Plot the following points on the coordinate grid.

14. B  (2,8)  15. E  (0,7)  16. X  (6,3)

20. Start at point (6,0). Go right three spaces. Then, go up seven spaces. What point do you land on? W
21. Start at point C. Go right seven spaces. Then, go down one space. What point do you land on? I
Write the ordered pair for each of the objects listed.

example: television - (7,3)

a. helicopter - (6,2)    b. shoes - (9,3)    c. pepper - (4,1)
d. wizard's hat - (7,7)   e. fish - (8,9)     f. golf cart - (3,7)

Tell which object is located at each point.

e. (3,4) - bench        f. (2,6) - tennis racket     g. (1,4) - bow
h. (5,5) - chick        i. (9,8) - soccer ball       j. (3,9) - horn/bugle/trumpet