

Math Live – *Ordered Pairs*: Parent Notes

Grade: 6 **Strand:** Shape and Space (Transformations) **Outcome:** 8

What should students be able to do?

Students must be able to identify and label points in the first quadrant of a graph. They will write the ordered pair that describes the location of each point. The ordered pair is also referred to as the coordinates of the point.

Students must be able to plot the points on the graph when they are given the ordered pairs that describe the location of these points.

Students should be able to identify and plot points when the graphs have different intervals along the horizontal and vertical axes such as 1, 2, 5 or 10. They should also be able to plot ordered pairs also known as coordinates such as (2,4) and (5,6) on a grid.

Common mistakes students make:

When students identify the points on the graph, they often forget which number to write first in the ordered pair. They need to be reminded that the first number of the ordered pair is always the coordinate of the point that comes from the horizontal axis (left to right). The second number of the ordered pair is always the coordinate of the point that comes from the vertical axis (up and down).

When students plot points of a graph, they forget which number of the given ordered pair relates to which axis. For example, they will plot the ordered pair (2, 6) incorrectly by placing the point at (6, 2) instead.

Students have particular difficulty identifying and plotting points in which one member of the ordered pair is zero. For example, they have difficulty plotting the point (0, 3).

Ideas for more practice:

Using graph paper, construct the horizontal and vertical axes to make the first quadrant. Label these axes in a variety of ways by using intervals of 1, 2, 5, or 10. Draw some points on the graph and have your child write the ordered pair for each point. Write some ordered pairs and have your child plot each point on the graph. Students may be more enthusiastic about the lesson if the points are connected to make an interesting shape.

The popular game, Battleship, is a board or electronic game where you plot coordinates (ordered pairs) to find and sink enemy ships. It is an excellent two-player game that can also be played on paper.