Exploring the Coordinate Plane
Overarching Student Learning Goals
In this unit, your child will work to build an understanding of the following:

## Recognize the $x$-axis and $y$-axis on the coordinate plane

- Students learn the coordinate plane is a grid made up of perpendicular lines made from
- Students learn the coordinate plane can help to specify locations in space ( $5^{\text {th }}$ grade students work only in the $1^{\text {st }}$ quadrant)



## Identify an ordered pair and graph the point on the coordinate plane

- Students identify the origin as $(0,0)$
- An ordered pair is a pair of numbers that shows the precise location of a point on the coordinate plane, with the first number showing the distance across on the $x$-axis, and the second number showing the distance up or down on the $y$-axis.
- The order of the numbers in the pair is important, as shown by the example where $(2,3)$ and $(3,2)$ are different points on the plane.

Resources/Tasks to support your child at home.

- Florida Student Tutorial: What do you Mean the Coordinate Plane Doesn't Fly? - https://bit.Iy/2D4CIDR
- LearnZillion: Use a Model to Identify Parts of the

Coordinate Plane - https://bit.ly/2RIneV1

- Florida Student Tutorial: You Sank my Battleship https://bit.ly/2AJE7hD
- Desmos Student Tutorial: Coordinate Plane (Quadrant 1) -

> https://bit.ly/2Fs5KPy

- Math Game: Soccer Coordinates - https://bit.ly/1jFawut
- LearnZillion: Plot Points on a Coordinate Grid -
https://bit.ly/2CqvZGj


## Solve problems involving the coordinate plane

- Students learn that the coordinate plane can be used to graph data, including numerical patterns
- Students use the coordinate plane to solve real-world problems
- Students use tables, such as simple function tables, to develop ordered pairs and compare patterns

STEP 1 Use the two given rules in the problem to generate the first four terms for the number of tablespoons of cocoa mix and the number of fluid ounces of water.

| Cocoa Mix (tbsp) | 3 | 6 | 9 | 12 | 18 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Water (fl oz) | 6 | 12 | 18 | 24 | 36 |

- Khan Academy: Coordinate Plane Word Problems -
https://bit.ly/2Rq37VF
- Khan Academy: Graphing Patterns on the Coordinate Grid - https://bit.ly/2VKkPSk
- Khan Academy: Interpreting Patterns on the Coordinate

Plane - https://bit.ly/2AENYW0

