



Common Core Math Newsletter

5th Grade Unit 1: Graphing

In this unit, students will determine number pattern rules, determine corresponding coordinates for the rules, and model mathematical and real world problems by graphing the coordinates in the first quadrant of the coordinate plane. In addition, students will develop more complex line plots to display collected data.

Standards

5.G.2

- Represent real world problems by graphing points in the first quadrant of the coordinate plan
- Represent mathematical problems by graphing points in the first quadrant of the coordinate plan
- Interpret coordinate values of points in the context of the situation

5.OA.3

- Generate two numerical patterns using two given rules
- Identify apparent relationships between corresponding terms
- Form ordered pairs consisting of corresponding terms from the two patterns
- Graph the ordered pairs on the coordinate plane (e.g. given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence)

5.MD.2

- Make a line plot to display a data set of measurements in fractions of a unit
- Use operations on fractions to solve problems involving information presented in line plots (e.g. given different measurements of liquid in identical beakers, find the amount of liquid each breaker would contain if the total amount in all the beakers were redistributed equally)

5th Grade Common Core Math

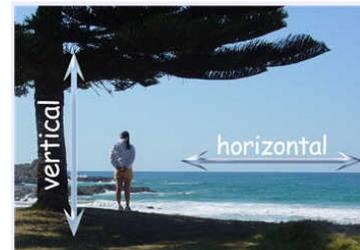
Unit 5: Graphing

Vocabulary

perpendicular lines that are at right angles (90°) to each other
intersect to cross over; have a common point

vertical in an up-down position; upright

horizontal going side-to-side; like the horizon

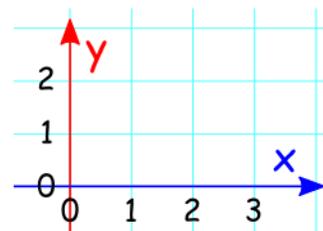


coordinates a set of values that show an exact position [e.g. (2,1)]

x-axis line on a graph that runs horizontally through 0; used as a reference line so you can measure from it

y-axis line on a graph that runs vertically through 0; used as a reference line so you can measure from it

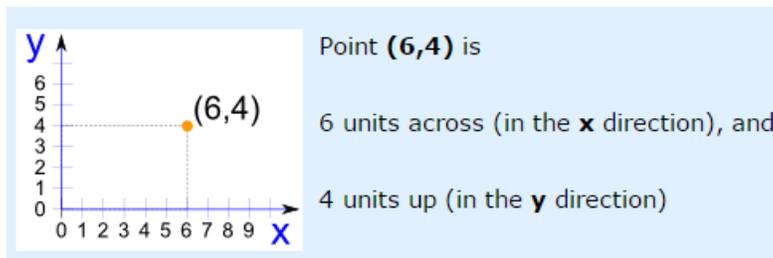
coordinate plane/ coordinate grid/ coordinate system plane containing both an x-axis and a y-axis that are perpendicular; each point on the coordinate plane can be specified by an ordered pair



origin point on the coordinate plane where the x-axis and the y-axis intersect (0,0); starting point

x-coordinate horizontal value in an ordered pair of coordinates: how far along the point is from the origin; always written first

y-coordinate vertical value in an ordered pair of coordinates; how far up or down the point is from the origin; always written second



ordered pair two numbers written in a certain order with parentheses; can show the position on a graph or coordinate plane

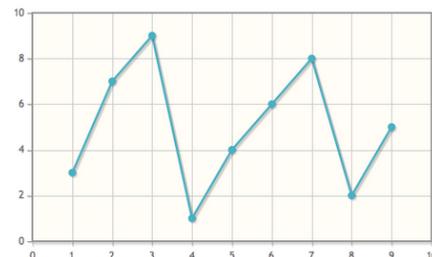
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Unit 5: Graphing

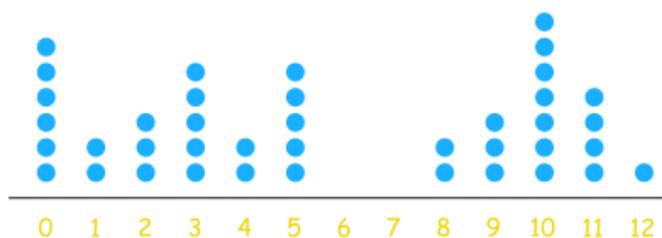
Vocabulary

Cont'd

line graph graph that uses points connected by lines to show how something changes in value



line/dot plot graphical display of data using dots



Additional Resources

[IXL.com Topics:](#)

- Data and Graphs
- Division with Decimals
- Multiply Fractions
- Divide Fractions

LearnZillion.com Videos:

- <https://learnzillion.com/lessonsets/347-understand-and-solve-problems-with-the-coordinate-plane>
- <https://learnzillion.com/lessonsets/344-understand-and-plotting-points-on-coordinate-planes>
- <https://learnzillion.com/lessonsets/700-generate-and-analyze-patterns-and-relationships>
- <https://learnzillion.com/lessonsets/549-generate-numerical-patterns-using-two-given-rules-form-ordered-pairs-from-the-patterns-and-graph-the-ordered-pairs>
- <https://learnzillion.com/lessonsets/699-solve-problems-involving-measurement-data-in-fractions-of-a-unit-displayed-line-plots>