



Mini-Map for M.EE.HS.S.ID.3

Subject: Mathematics

Statistics and Probability—Interpreting Categorical and Quantitative Data (S.ID)

Grade: 11

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.HS.S.ID.3 Interpret general trends on a graph or chart.	M.S.ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
<p>Arrange objects in a specific order (e.g., smallest to largest). Group objects by some attribute value (e.g., shape, size, texture, numerical pattern).</p>	<p>Recognize the structure of bar graphs, picture graphs, line plots, and pie charts, such as the title and labels for the x- and y-axes. Understand that bars are used to display data on bar graphs. Understand that pictures, symbols, or geometric figures are used to display data on picture graphs. Understand that on a line plot, "x" is used to represent the data values, and sectors are</p>	<p>Recognize symmetric distribution, outliers, and peaks in a data distribution shown graphically. Recognize data values substantially larger or smaller than the other values as outliers. Recognize peaks as data values that most frequently occur. Recognize symmetric distribution as distributions where the left- and right-hand sides of the distributions are roughly equal.</p>	<p>Analyze the overall shape of the data distribution and communicate whether the distribution is symmetric, has outlier(s), or peaks. Draw inferences by interpreting general trends on a graph or chart.</p>	<p>Draw inferences by comparing the shape and spread of two data sets (e.g., the student compares the peaks of two sets of data, height of soccer players and height of basketball players, to communicate that basketball players are, in general, taller than soccer players).</p>

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
	used to represent data on pie charts.	Recognize whether a set of scores is spread-out or grouped together (variability).		

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to construct a graph, students begin by learning to recognize what is the same and different between familiar items, such as color, shape, quantity, size, texture, and pattern. Educators should take care to use words that describe (e.g., more, less, red circle, same, different) while defining and demonstrating their meaning. While students do not need to say these words, they do need to learn the meanings. Students will also begin to group two or more items in the same set based on an attribute (e.g., two CDs, bumpy balls and bumpy gravel, red rectangles). As the students group two or more items, the educator will demonstrate the representation in graphs and charts and encourage students to actively participate in their creation.

How is the Distal Precursor related to the Target?

Students actively participate in the creation of bar graphs, picture graphs, line graphs, and pie charts by placing representations for each response to the research question.

Instructional Resources

Released Testlets
See the Guide to Practice Activities and Released Testlets .
Using Untested (UN) Nodes
See the document Using Mini-Maps to Plan Instruction .

[Link to Text-Only Map](#)

M.EE.HS.S.ID.3 Interpret general trends on a graph or chart.

