

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

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
	used to represent data	Recognize whether a		
	on pie charts.	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.

