



## Mini-Map for M.EE.6.SP.5

Subject: Mathematics

Statistics and Probability (SP)

Grade: 6

### Learning Outcome

DLM Essential Element	Grade-Level Standard
<p><b>M.EE.6.SP.5</b> Summarize data distributions shown in graphs or tables.</p>	<p><b>M.6.SP.5</b> Summarize numerical data sets in relation to their context, such as by: Reporting the number of observations. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</p>

### 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>Communicate understanding that distribution of data can be described by the overall shape of the distribution. Recognize that in a line plot, "x" is used to represent the data values, and labels are used to represent x-</p>	<p>Analyze data distribution to recognize outliers, peaks, or symmetric distribution. Recognize data values substantially larger or smaller than the other values as outliers. Recognize peaks as data</p>	<p>Summarize data distribution by describing the overall shape of data in terms of outliers, peaks, and symmetric distribution.</p>	<p>Recognize appropriate measures of center, such as mean or median, by analyzing the overall shape of the data distribution. For example, use the mean to describe the center if the data distribution is symmetric, and use</p>

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
	axis, y-axis, and the title of the graph.	values that most frequently occur. Recognize symmetric distribution as distributions where the left- and right-hand sides of the distributions are roughly equal.		median to describe the center if the data distribution is not symmetric.

## Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

### *How is the Initial Precursor related to the Target?*

In order to summarize data, students begin by learning to recognize what is the same and different between familiar items; color, shape, quantity, size, texture, and pattern. Educators should take care to use attribute words 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 tigers, bumpy balls and bumpy gravel, red spoons). As the students group two or more items, the educator will demonstrate the representation in a bar graph or line plot and encourage students to actively participate in its creation.

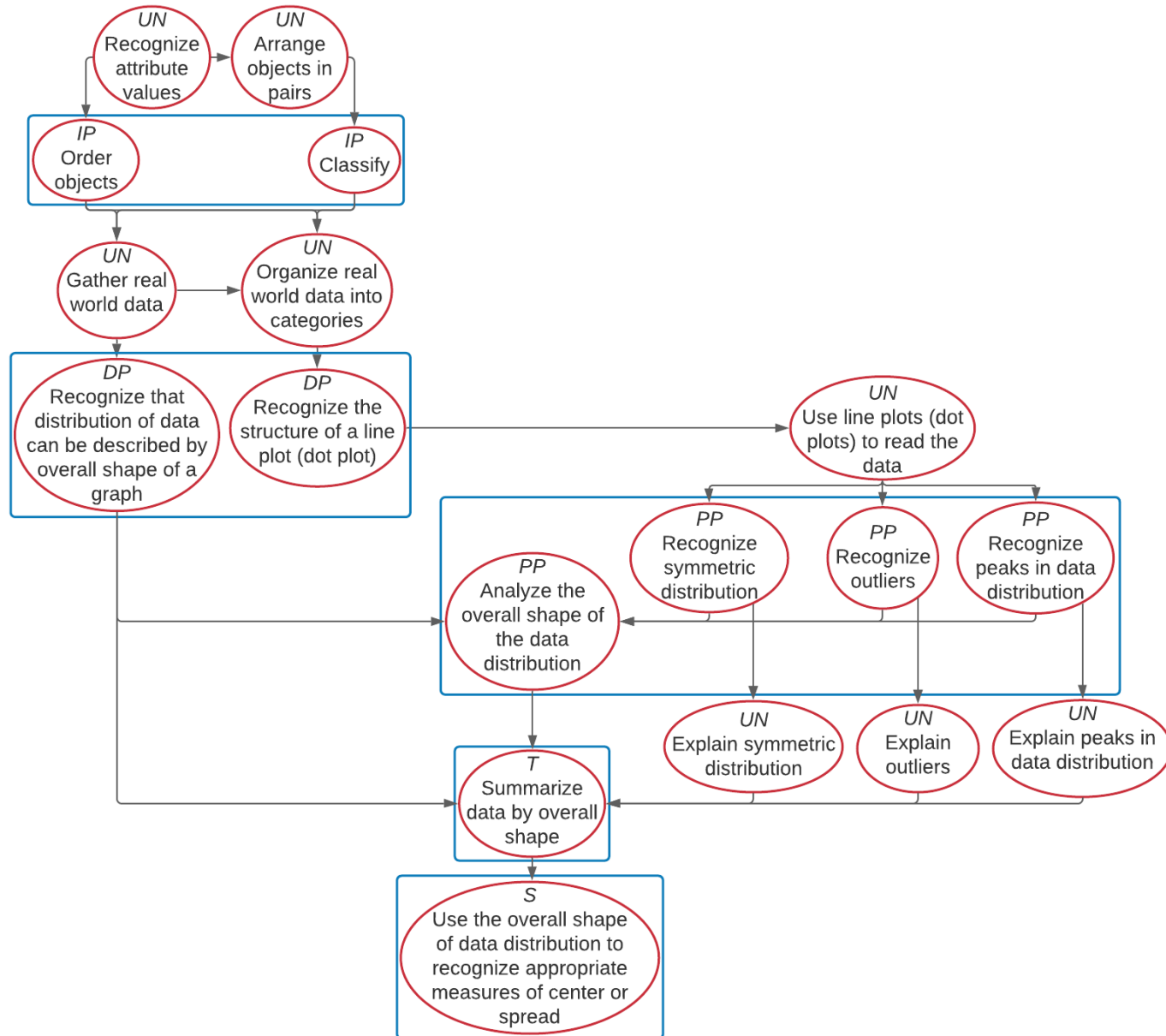
### *How is the Distal Precursor related to the Target?*

Students can actively participate in the creation of graphs and line plots by placing representations, x's, or dots for each response to the research question. When the graph or line plot is complete, the educator will encourage students to use their core vocabulary to describe the overall shape of the data and will also demonstrate the description (e.g., up, not up, same).

## Instructional Resources

Released Testlets
See the <a href="#">Guide to Practice Activities and Released Testlets</a> .
Using Untested (UN) Nodes
See the document <a href="#">Using Mini-Maps to Plan Instruction</a> .

**M.EE.6.SP.5** Summarize data distributions shown in graphs or tables.



Map Key	
IP	Initial Precursor
DP	Distal Precursor
PP	Proximal Precursor
T	Target
S	Successor
UN	Untested
Boxes indicate tested nodes	