

Mini-Map for M.EE.3.MD.3

Subject: Mathematics

Measurement and Data (MD)

Grade: 3

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.3.MD.3 Use picture or bar graph data to answer questions about data.	M.3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Recognize attributes or characteristics of an object such as color, height, or weight. Form pairs of objects by matching two objects sharing a specified attribute.	Group together objects by attribute values such as shape or size (e.g., group together a square, a rectangle, and a rhombus, as they all have four sides). Order objects by following a specific rule (e.g., arrange three objects with different sizes from the smallest to largest).	Recognize the structure of bar and picture graphs such as the framework, specifiers, or labels for the x- and y-axes. Understand that bars are used to display data in bar graphs, where the height of the bar represents the number of observations for each category. Understand that pictures, symbols, or geometrical figures are used to display data in picture graphs, where the number of pictures or symbols represents	Using a bar or picture graph, answer explicit questions by interpreting information directly from the graph (e.g., in a bar/picture graph displaying students' favorite ice cream, how many students like strawberry ice cream?). Demonstrate an understanding of the information represented on the graph.	Using a bar or picture graph, answer questions that require interpretation and integration of information presented on the graphs (e.g., in a bar/picture graph displaying students' favorite ice cream, how many students like strawberry and chocolate ice creams? Or which is the favorite ice cream of all the students?). Demonstrate the ability to use information

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
		the number of observations for each category.		represented on the graph.

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to be able to understand data on a graph, students begin by learning to notice the attributes of an object. The educator draws the students' attention to new objects or stimuli, labels them, describes them, and the student observes, feels, or otherwise interacts with them. Educators encourage students to begin placing like objects together.

How is the Distal Precursor related to the Target?

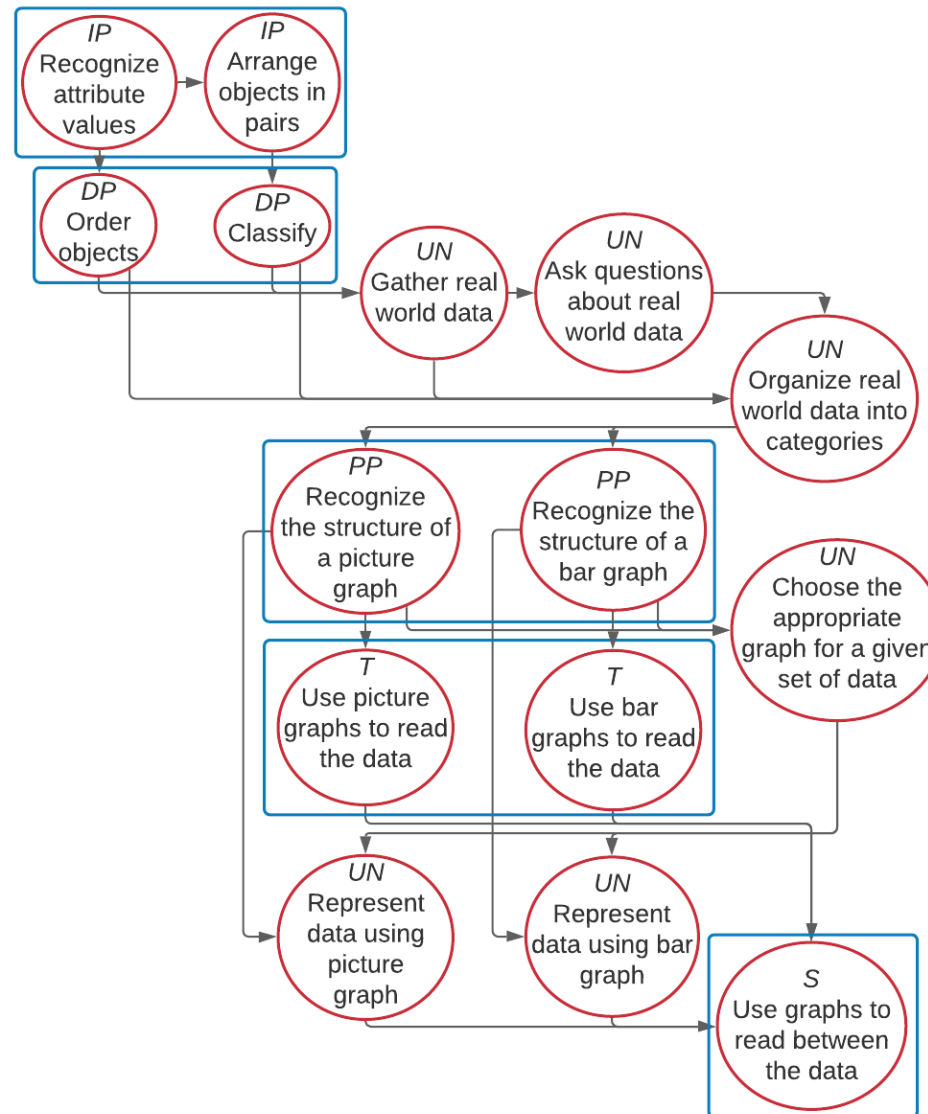
As the students' attention to objects increases, educators will begin to draw the students' attention to what is the same and different between familiar items: color, shape, quantity (1-4), size, texture, and pattern. Educators should take care to use attribute words while defining and demonstrating 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 items in the same set based on their attributes (e.g., two tigers, bumpy ball and bumpy gravel, red spoons).

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.3.MD.3 Use picture or bar graph data to answer questions about data.



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