New York State Common Core



Mathematics Curriculum

Topic D Data Interpretation

1.0A.1, 1.MD.4

Focus Standa	ards:	1.OA.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
		1.MD.4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
Instructional Days:		4	
Coherence	-Links from:	GK–M3	Comparison of Length, Weight, Capacity, and Numbers to 10
	-Links to:	G2-M2	Addition and Subtraction of Length Units
		G2–M7	Problem Solving with Length, Money, and Data

Topic D closes the module as students organize, represent, and interpret personally relevant data in Lesson 10 (1.MD.4). As students work as a class to collect, sort, and organize data into a graph, they find great purpose and excitement. They begin to answer, and then ask questions about, the number of data points in a given category and in two categories.

Lesson 11 allows students to take a more independent role in the collecting, sorting, organizing, and representing phases involved in graphing. They work on their own to ask and answer questions about the data set. This work prepares them for the comparison work of the last two lessons.

In Lesson 12, students interpret information presented in graphs by exploring *compare with difference unknown* problems. They begin with visualizing these problems in their easily accessible "equalizing" contexts by answering questions such as, "How many more students would Category A need in order to have the same amount as Category B?" Students use their understanding of comparing lengths from Topics A, B, and C to now compare the responses in three categories.

Lesson 13 continues this exploration with students again interpreting data sets to ask and answer varied word problems including "How many students were polled in all?" and "How many more students are in Category C than in Category A?" (**1.OA.1**). Throughout Topic D, students also apply their learning from earlier in the module as they begin to notice the connection between length units and data points on a graph.





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A Teaching Sequence Toward Mastery of Data Interpretation

Objective 1: Collect, sort, and organize data; then ask and answer questions about the number of data points. (Lessons 10–11)

Objective 2: Ask and answer varied word problem types about a data set with three categories. (Lessons 12–13)



