Data Management and Probability

Activity 7 Assessment

Data Management Consolidation

Collecting, Organizing, and Representing Data

Creates questions of interest that generate qualitative and/or quantitative data.

What types of waste do you have after eating your lunch: waste, recycling, organic?

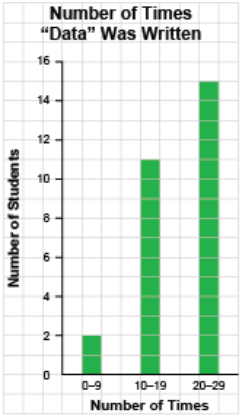
"I will get qualitative data because the possible answers are categories."

Collects data using appropriate organizers (e.g., frequency tables, stem-and-leaf plots).

Number of times "data" written	Frequency
0–9	2
10–19	11
20–29	15

"I organized the data using a frequency table to I can see the number of times most students wrote the word data"

Represents results using various tools.

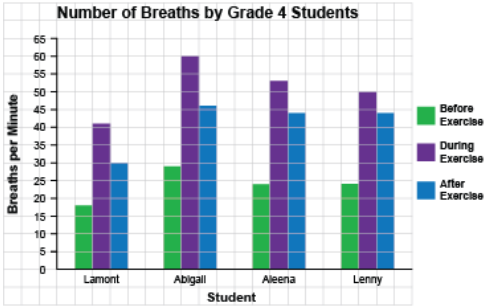
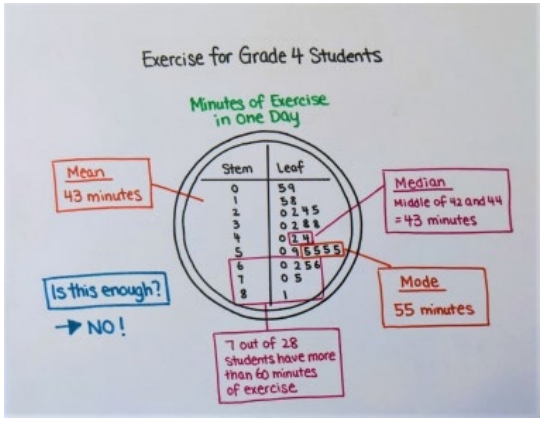


"I showed the data on a bar graph using many-to-one correspondence."

Observations/Documentation

Activity 7 Assessment
Data Management Consolidation

Collecting, Organizing, and Representing Data (cont'd)

Differentiates between primary and secondary data. "When I collect information, it is primary data. When I use data collected by someone else, it is secondary data."	Represents data graphically using many-to-one correspondence with appropriate scales and intervals.  "I showed the data on a multiple-bar graph using many-to-one correspondence."	Creates infographics to show data in appropriate ways and incorporates relevant information for a specific audience.  "I want Grade 4 students to use the data to decide if they get enough exercise."

Observations/Documentation

Data Management and Probability

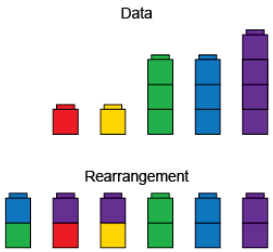
Activity 7 Assessment

Data Management Consolidation

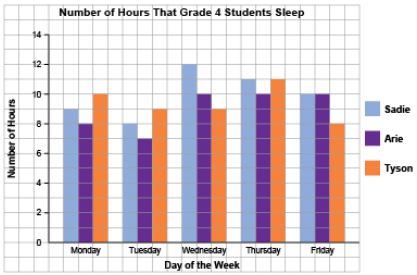
Determining the Mean, Median, and Mode

Reads and interprets data displays to determine mode and mean.

Number of siblings for a group of Grade 4 students: 0, 1, 1, 3, 3, 4
- the mode: 1 and 3
- the mean is 2



Visualizes and determines the median value as a middle measure.

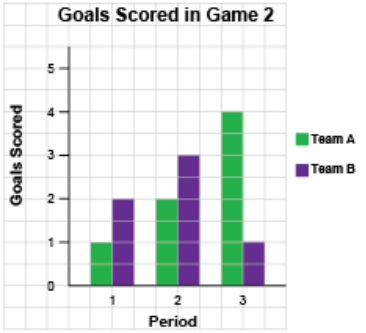


"For Sadie, I order the number of hours from least to greatest: 8, 9, 10, 11, 12. The middle number is 10, so the median is 10 h."

Compares distribution of data sets represented on the same data display.

	Mode	Mean	Median
Sadie	No mode	10 h	10 h
Arie	10 h	9 h	10 h
Tyson	8 h and 9 h	9 h	9 h

Fluently and flexibly finds the mode, mean, and median and explains what each indicates.



"Team B: no mode;
mean: 2 goals;
median: 2 goals.
Team B, on average,
scores 2 goals in each period."

Observations/Documentation