

Cluster 6.12: Measurement and Data

6.12D: Statistics and Data: Library Visitors

Focusing TEKS

6.12D Measurement and Data. The student applies mathematical process standards to use numerical or graphical representations to analyze problems. The student is expected to summarize categorical data with numerical and graphical summaries, including the mode, the percent of values to each category (relative frequency table), and the percent bar graph, and use these summaries to describe the data distribution. **Readiness Standard**

Additional TEKS:

6.2D Order a set of rational numbers arising from mathematical and real-world contexts. **Readiness Standard**

6.3D Add, subtract, multiply, and divide integers fluently. **Readiness Standard**

6.5B Solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models. **Readiness Standard**

6.10A Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts. **Readiness Standard**

Focusing Mathematical Process

6.1A Apply mathematics to problems arising in everyday life, society, and the workplace.

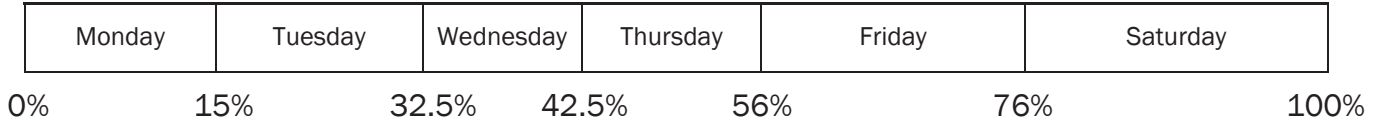
6.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.

6.1E Create and use representations to organize, record, and communicate mathematical ideas.

6.1F Analyze mathematical relationships to connect and communicate mathematical ideas.

Performance Task: 6.12D
Statistics and Data: Library Visitors

The city library tracks the number of visitors each day in order to determine the best hours of operation and days best to offer various activities and events. Last week a total of 1,200 patrons visited the library. The librarian made a poster of last week’s daily attendance using a percent bar graph and posted it in the learning center as part of an activity for patrons.



- Which day represents the mode for the weekly attendance?
- What is the difference between the highest and lowest attended days of the week?
- What is the mean attendance per day? What is the order of the days last week by attendance from least to most visitors?

Justify your reasoning.

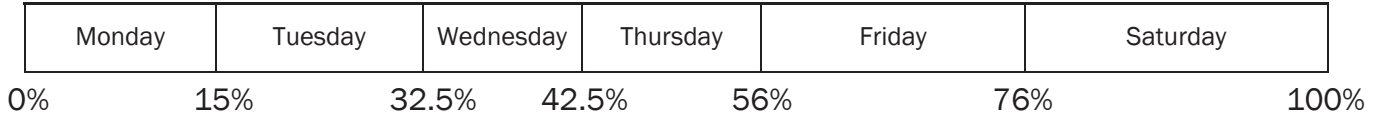
Procedural	0	1	2
Conceptual	0	1	2
Communication	0	1	2

Total points: _____



Performance Task: 6.12D
Statistics and Data: Library Visitors

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- What percent of the weekly visitors is represented by each day of the week?
- How many visitors did the library have each day?
- Which day represents the mode for the weekly attendance, the day with the most visitors?

Justify your reasoning.

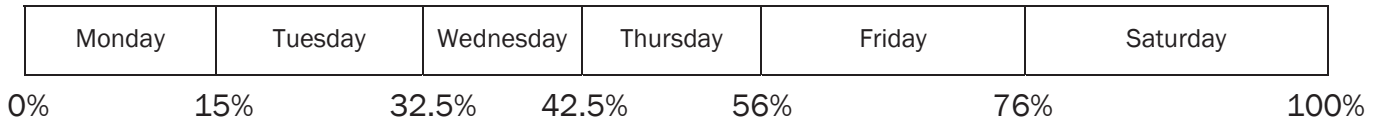
Procedural	0	1	2
Conceptual	0	1	2
Communication	0	1	2

Total points: _____



Performance Task: 6.12D
Statistics and Data: Library Visitors

The city library tracks the number of visitors each day in order to determine the best hours of operation and days best to offer various activities and events. Last week a total of 1,200 patrons visited the library. The librarian made a poster of last week’s daily attendance using a percent bar graph and posted it in the learning center as part of an activity for patrons.



- Which day represents the mode for the weekly attendance?
- What is the difference between the highest and lowest attended days of the week?
- Which day of the week has a number of visitors closest to the mean number of daily visitors?
- What is the difference between the mean and median number of daily visitors?
- What is the order of the days last week by attendance from least to most visitors?

Justify your reasoning.

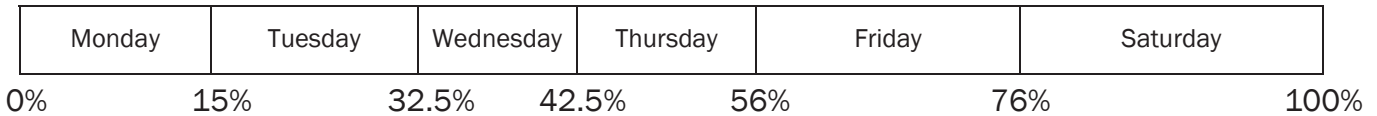
Procedural	0	1	2
Conceptual	0	1	2
Communication	0	1	2

Total points: _____



Performance Task: 6.12D
Statistics and Data: Library Visitors

The city library tracks the number of visitors each day in order to determine the best hours of operation and days best to offer various activities and events. Last week a total of 1,200 patrons visited the library. The head Librarian made a poster of last week’s daily attendance using a percent bar graph and posted it in the learning center as part of an activity for patrons.



1. What percent of the weekly visitors came to the library each day?

2. Which day represents the mode for the weekly attendance?

3. How many visitors came to the library on the highest attended day of the week?

4. How many visitors came to the library on the lowest attended day of the week?

5. What is the difference in visitors between the highest and lowest attended days of the week?

6. How many people visited the library on each day last week?



Name _____ Date _____

7. How many days of the week was the library open last week?
8. What is the mean attendance per day?
9. What is the order of the days last week by attendance from least to most visitors?

