

Title Favorite Choices--Graphs

Curriculum Math 5-8 (Intermediate/Middle)

Grade Level Span 5-8

Purpose- Students use technology to collect, organize and analyze data related to a personal interest. Students will use this data to create at least two types of graphs.

Description- Each student or group will survey at least 25 people about a topic of choice. Students organize this information to create at least 2 different displays using technology. Students will interpret, analyze, and present the results.

Activities	Curriculum Standards	NETS for Students
1. Students will choose a topic and survey question with teacher approval.	MN Middle Level Standard: Chance & Data Handling #2 NCTM: 5,6	3
2. Students will collect data from 25 or more people.	NCTM: 5	N/A
3. Students will organize data in a table or chart.	MN Middle Level Standard: Chance & Data Handling #3 NCTM: 2,5	7,8
4. Students will use this data to create at least 2 different graphs/displays using technology. This may include a circle/pie graph, bar graph, graphing calculators, etc. Graphs must be properly labeled.	MN Middle Level Standard: Chance & Data Handling #3,4 NCTM: 5,6,8,10	4,5,6,7,8

5. Students will analyze and summarize their results. Students will word process a paragraph explaining which graph is the better representation of their data and why.	MN Middle Level Standard: Chance & Data Handling #4 NCTM: 5,6,7,8,9,10	4,6,9
6. Students will word process a second paragraph answering the following questions: Were your results what you expected? Were you surprised? Why or why not?	MN Middle Level Standard: Chance & Data Handling #4,5 NCTM: 7,8	4,6,9
7. Students will use technology to present their final project. (e.g. power point, video, etc.)	NCTM: 6,7,8,9,10	4,5,6, 8,9,10
COMMENTS: We feel that #1 NETS Performance Indicator is likely to occur during any one of the given activities.		

Tools and Resources

(List all Web sites, specific software and hardware needs) Computer- Graphic software, graphing calculator, Power Point, digital camera, overhead projector, word processing software, and printer.

Assessment

(How will you assess the students' learning? If you have a rubric, record it here. Be as specific as possible)
Teacher chooses the type of grading using the following checklist as criteria.

STUDENT

- Compose survey with question (teacher approved)
- Complete survey (collects data of 25 or more people)
- Create table to organize data
- Use table to create at least 2 graphs
Graph 1 Graph 2
- Proper labeling on graphs (title, axis, percentages, scale)
- Write paragraph analysis on their findings and interpret their results
- Identify applicable mode, mean, median, range, central tendencies
- Use of technology for final presentation
- All sources are cited properly

BONUS

- Volunteer to present on the first day
- Creative/quality use of technology
- Use of internet to communicate with other schools
- More than 2 graphs

ACCOMMODATIONS

- Accommodations may be made according to a student's IEP.

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Personal Account

(Have you taught this lesson sequence before? What are the great learning/experiences you had?)

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