Maps, Charts, and Graphs

Answer Keys, Program 5: Worksheets 1 – 3

Each question on every worksheet offers the students the option of marking "Teacher" instead of or in conjunction with answering the question. The "Teacher" option is included to support student understanding and achievement. Students may have as much help and guidance as they need to understand concepts and master skills.

Instructors may decide whether to use the two or four point scoring rubric for constructed response problems (problems that use numbers, pictures, or words to justify/explain student answers). See the appendix for the complete rubrics.

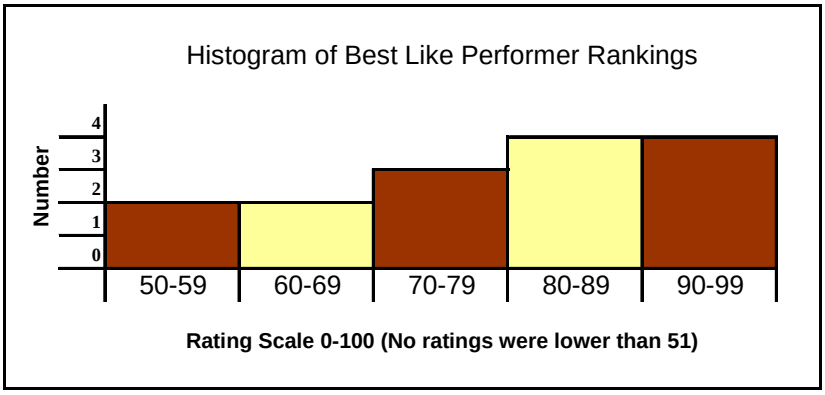
Two-Point Scoring Rubric	Four-Point Scoring Rubric
2 – Complete	4 – Complete
1 – Partial	3 – Clear
0 – Inadequate	2 – Partial
	1 – Minimal
	0 - Inadequate

Worksheet 1

1. C. There are more than 250 10th graders.
2. D. Number of 10th graders > number of 9th graders.
3. A. Monte Carlo sales were $90,000 more than the Corvette sales.
4. B. 95 cars
5. D. There were three times as many Caprices sold than Corvettes.
6. B. 15
7. B. 1960-1961
8. C. 2,200
9. A. 1963-1964
10. D. 1961-1962

Worksheet 2

1. A. $ 75,000
2. D. (– 2, – 4)
3. B. Grade 4 and 5
4. Graphs may vary slightly. *See sample histogram*. Answers should reflect the following: 1) The data set should be ordered 51, 59, 63, 68, 70, 77, 78, 80, 82, 86, 89 90, 91, 95 98. 2) The data set should be grouped into 5 logical intervals and the frequency for each interval counted. One possible way to group the data… 50s: 55 and 59 (2), 60s: 63 and 68 (2), 70s: 70, 77, 78 (3), 80s: 80, 82, 86, 89 (4), 90s: 90, 91, 95, 98 (4) 3) The histogram should be drawn without gaps between the bars. There should be a title and other labels to help explain the histogram.

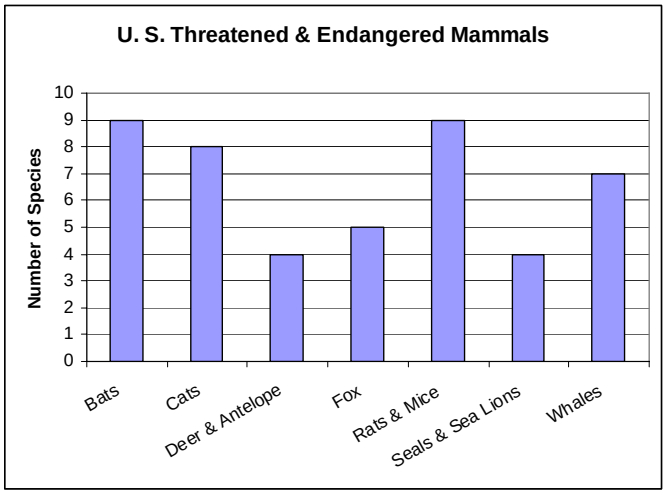


5. A. More than half of the surveyed teens play video games in the evenings.
6. C. 130 mi.

7. B. 1963-1964
8. A. 1961-1962
9. 11%, Answers should reflect the problem: 13 – 2 = 11.
10. B. A-7

Worksheet 3

1. $5.40. Answers should reflect the following problem: $18.00 x (.10 + .20) = $5.40.
2. C. Akron and Toledo lost the same number of people between 2000 and 2003.
3. Mixed Breed plus Beagles. Answers should reflect the following: 1) There are 2,000 dogs in town so half the dogs would be 1,000 dogs. 2) Only two dog breeds may be used. 3) There are just over 700 mixed breed dogs. 1,000 – 700+ = just under 300. 4) The breed closest in number to 300 is the Beagle.

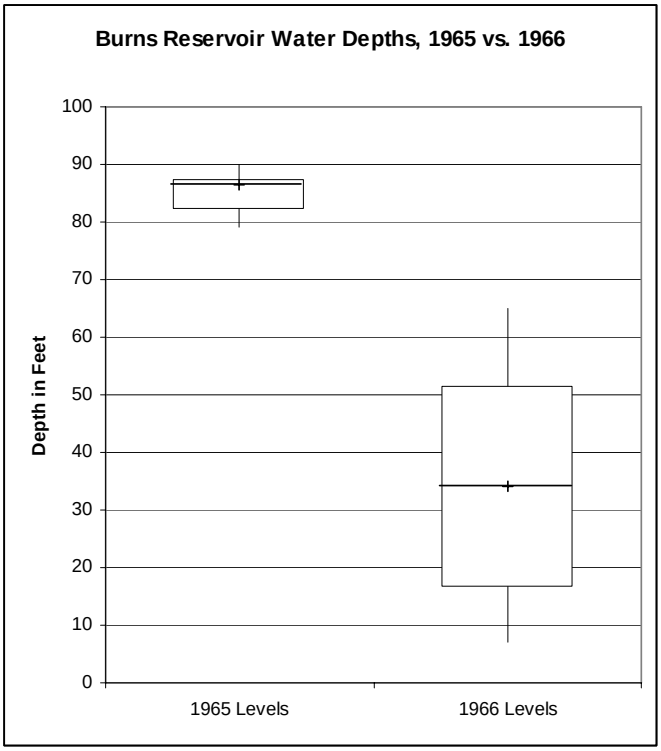


4. Answers may vary. Answers should reflect the following: 1) the graph should be divided into regular intervals that reflects the span of numbers in the data. 2) There should be a descriptive title and labels to help others understand the graph. 3) The data entered into the graph should accurately depict the data given in the table. Variables: Students may use intervals of 2 (0, 2, 4, 6…) or 3 (0, 3, 6, 9). The animals may be arranged in some other order.

5. Answers may vary. Most students will probably draw a double line graph, a double bar graph or box-and-whisker plots (box plots). Answers should reflect the following: 1) the graph(s) should be divided into regular intervals that reflects the span of numbers in the data. 2) There should be a descriptive title and labels to help others understand the graph. 3) The data entered into the graph should accurately depict the data given in the table. Variables: A student who chooses to draw box plots may wish to divide the data into two separate box plots rather than put them into the same graph. Box plots may be horizontal or vertical - as in the example.

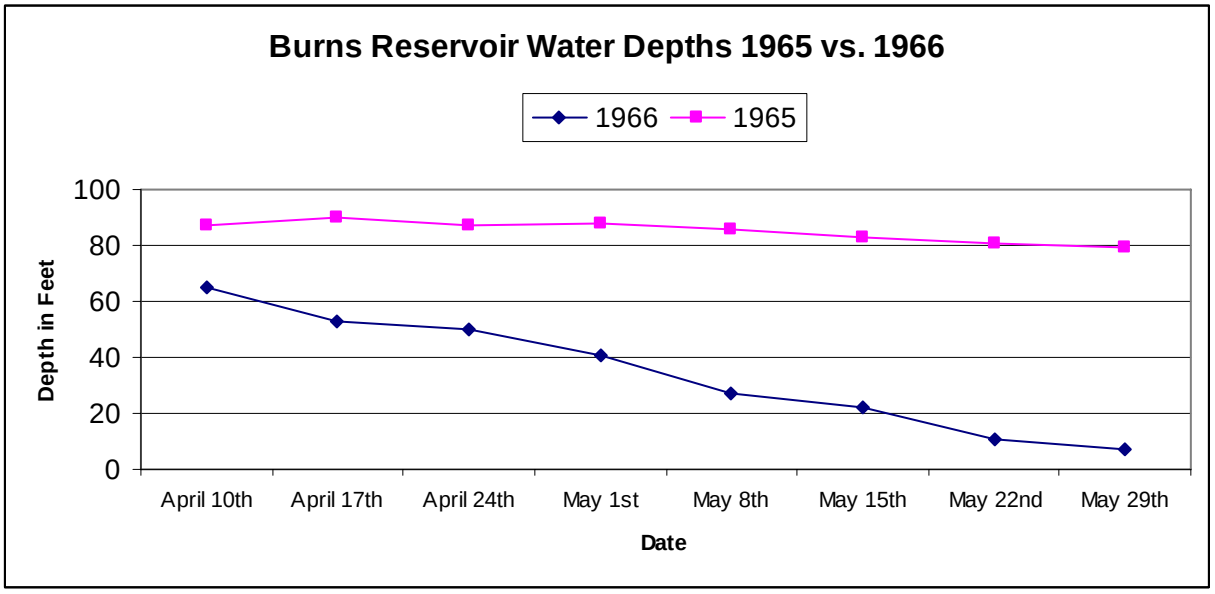
   Data summery numbers for 1965 and 1966.

	1965	1966
Median	86.5	34
Lower Quartile	82	16.5
Lower Extreme	79	7
Upper Extreme	90	65
Upper Quartile	87.5	51.5



See more sample graphs on the next page.

5. Double Line Graph Example



5. Double Bar Graph Example

