

Key

Name: _____ #: _____

Math, Period: _____

Date: _____

Topic 19 Test Review

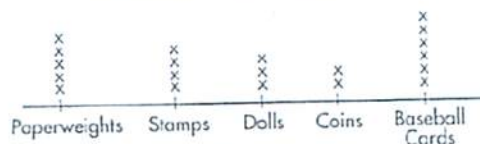
Identify each of the following types of graphs or tables. Make sure you understand the appropriate times to use each of the following.

Top 5 names in Hills City, 2006

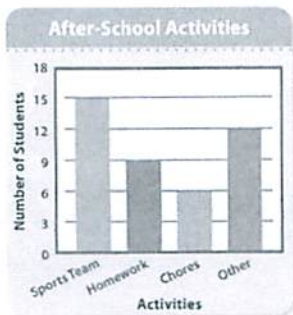
Jacob	26
Emily	15
Michael	15
Madison	21
Ethan	8

1. frequency table

Students in Ms. Young's Class

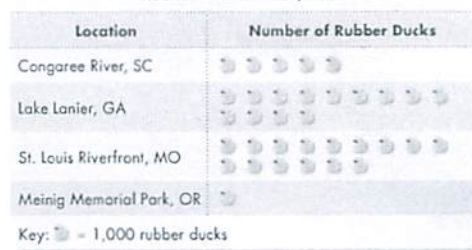


2. line plot

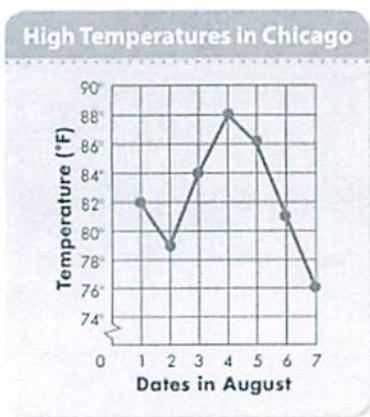


3. bar graph

Rubber Duck Derbies, 2006



4. pictograph



5. line graph

6. What is the scale on the line graph?

0-90°

7. What are the intervals on the line graph?

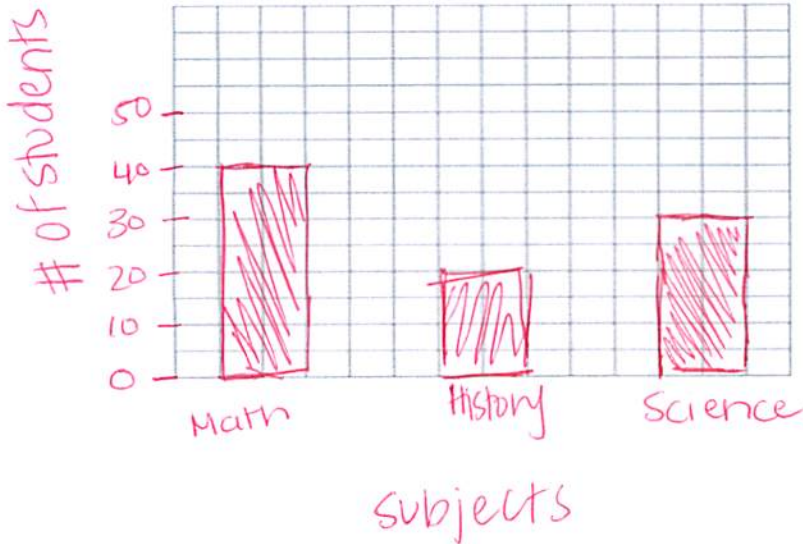
by 2°

8. Time is always recorded on which axis?

X-axis

Fav. Subjects

9. Convert this picture graph into a bar graph?



Favorite Subjects		
Math		40
History		20
Science		30

Key: = 10 students

10. Why is a bar graph the appropriate graph choice above?

b/c we are discussing categories

- * Tanya gathered data about the number of participants in pie-eating contests across Texas. She drew a picture graph to display the data. *
Use Tanya's pictograph below to answer questions 3 through 5.

Pie-Eating Contests, 2007

Location	Number of Participants	
Alpine		3,000
Austin		5,000
Dallas		7,000
El Paso		2,000
Galveston		6,000
Houston		4,000

Key: = 1,000 pie-eaters

11. What is the difference between the city with the greatest number of participants and the least number of participants?

$7,000 - 2,000 = 5,000$ participants

12. If a contest in Del Rio had 3,500 participants, how many pie symbols would be pictured in Tanya's graph?

3.5 pies or $3\frac{1}{2}$ pies

13. How many total participants were in pie-eating contests across Texas in 2007?

add all pies = $27 \times 1,000 = 27,000$ pie-eaters

14. What type of graph would be most appropriate to display the total amount of money Henry earned working over 5 days?

- A picture graph **B** line graph C circle graph D bar graph

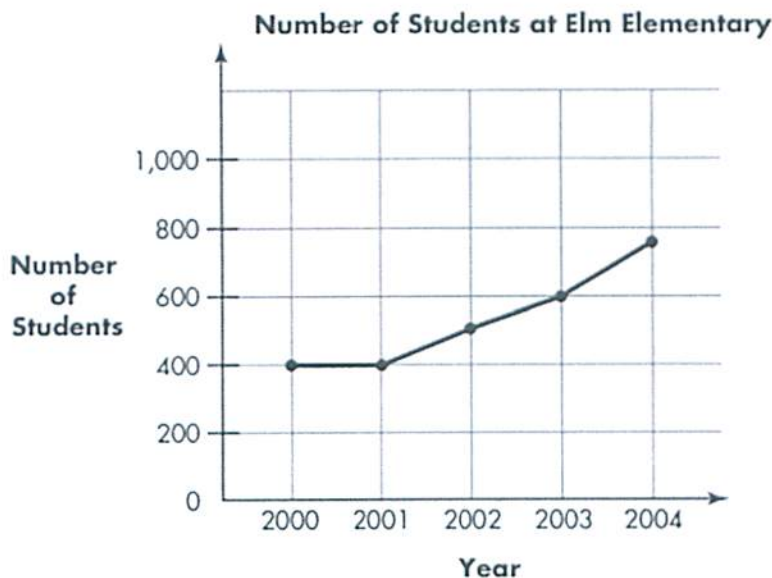
15. What type of graph would be most appropriate to compare the populations of 4 cities?

- F picture graph G line graph H circle graph **J** bar graph

16. What type of graph would be most appropriate to display the change in height of a child over many years?

- A picture graph **B** line graph C circle graph D bar graph

* Writing to Explain Use the line graph to answer the questions. (17-19) *



17. Describe the trend in the number of students at Elm Elementary between 2000 and 2004.

It remained the same till 2001 then increased until 2004

18. How many more students were at the school in 2003 than in 2000?

$600 - 400 = 200$ more students

19. Could this data be displayed on a bar graph? Is a bar graph or line graph more appropriate? Explain.

A line graph is more appropriate b/c we are looking for change over time.

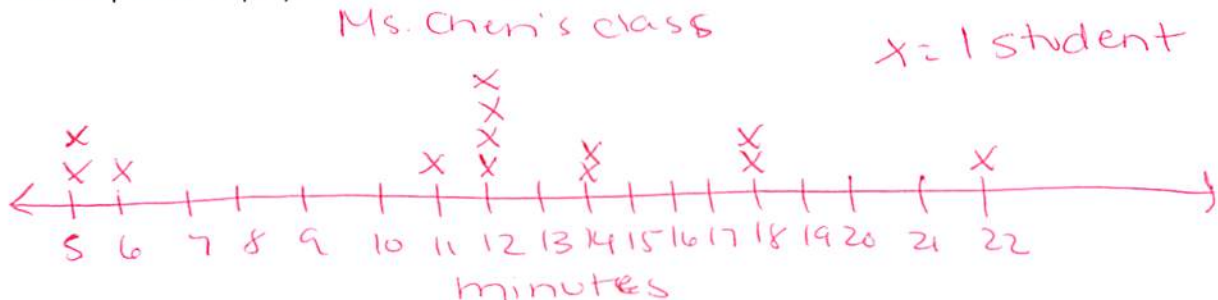
19. Chen's class took a survey on how many minutes it took each student to get to school. The results are below:

12 14 5 22 18 12 12 6 14 18 12 5 11

20. What are the highest and lowest times?

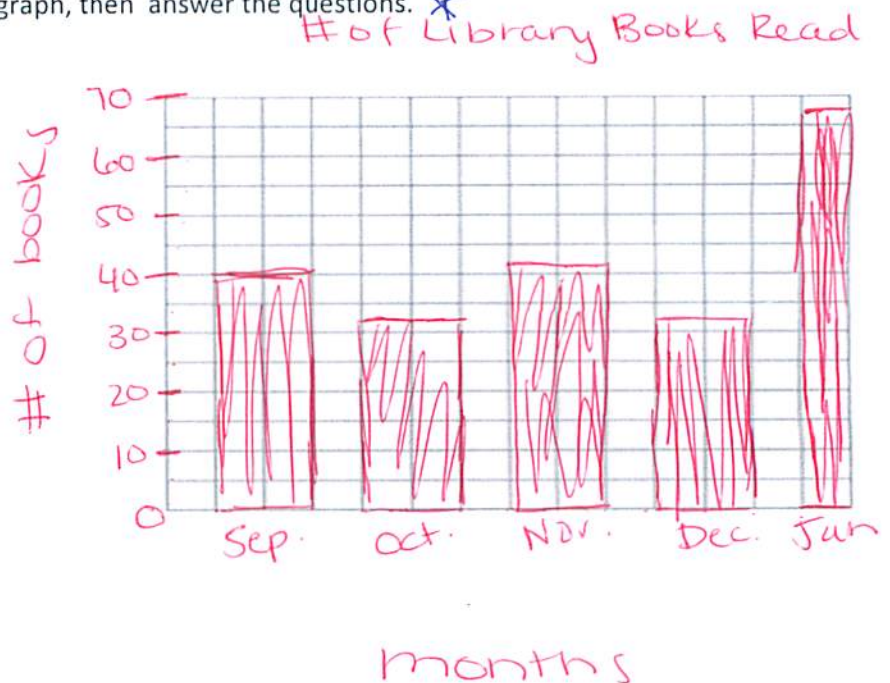
H = 22 minutes L = 5 minutes

21. Make a line plot to display the data from Ms. Chen's class.



* Use the frequency table to make a graph, then answer the questions. *

Number of Library Books Read	
Month	Books
September	40
October	33
November	42
December	33
January	67



22. What scale would you use?

0-70

23. What intervals would you use?

10's

24. Describe the trend from December to January.

increased, positive
|
from 33 to 67

Name _____

Practice
19-5

$$\begin{array}{r} 588^4 \\ - 225 \\ \hline 327 \end{array}$$

Median, Mode, and Range

25. Find the range of this data set: 225 342 288 552 263.

$$552 - 225 = 327$$

~~26.~~ Find the median of this data set: 476 234 355 765 470.

$$232 \quad 355 \quad (470) \quad 746 \quad 745$$

27. Find the mode of this data set:

16 (7) 8 5 16 (7) 8 4 (7) 8 16 (7)

$$\boxed{7}$$

$$\begin{array}{r} 99 \\ - 46 \\ \hline 53 \end{array}$$

28. Find the range of this data set:

64 76 46 88 88 43 99 50 55.

$$99 - 46 = 53$$

29. Reasoning Would the mode change if a 76 were added to the data in Exercise #28?

Yes, it would be 76 & 88 b/c they both occur twice.

The table gives the math test scores for Mrs. Jung's fifth-grade class.

76	54	92	88	76	88
75	93	92	68	88	76
76	88	80	70	88	72

Test Scores

Practice 19-5

~~30.~~ Find the mean of the data.

OMIT

31. Find the mode of the data.

88

32. Find the median of the data.

78

33. What is the range of the data set?

39

34. Find the range of this data set: 247, 366, 785, 998.

A 998

B 781

C 751

D 538

54 68 70 72
75 76 76 76
76 80 88 88
88 88 88 92
92 98 80

$$\begin{array}{r} 80 \\ + 76 \\ \hline 156 \end{array}$$

35. Writing to Explain Will a set of data always have a mode? Explain your answer.

No, because sometimes a # will not repeat and there will not be one that occurs the most.

$$\begin{array}{r} 156 \div 2 \\ \hline 78 \\ \hline 893 \\ - 54 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 998 \\ - 247 \\ \hline 751 \end{array}$$