

Surveys - OGT

A survey was taken to find out what the most popular foreign language class was.

1-4

class		
Latin	### ### III	- 13
Spanish	### ### ### ###	- 20
French	### III	- 8
German	### ### I	- 11
Mandarin	### ### ### ### I	- 21

1. What percent liked Spanish the most?
2. What percent liked either French or German.
3. This survey was taken during 2 study halls. Is the data bias or unbiased? why?
4. There are 500 students who attend this school. Do you think it is an appropriate sample size?

This is a survey about favorite sports.

5-7

Football	### ### ### ### I
baseball	### ### III
Basketball	### ### ### I
Soccer	### I
Wrestling	IIII
Volleyball	### III

5. This data was collected from 3 optional gym classes. Is it bias or unbiased? why?
6. What percent like baseball best?

7. What % like soccer, wrestling or volleyball.
8. Mikey is creating a survey. He has decided to sample everyone in his grade on their favorite music. Emma says his survey is bias. Is Emma right? Explain.
9. Create a survey result table using the following data on Favorite Movie Genre.

Comedy = 9

Horror = 17

Romance = 11

Science Fiction = 12

Action = 15

Documentary = 2

10. Based on the chart you made what % did not choose Romance or horror as their favorite?

Stem-and-leaf Plots - OGT

0	
1	8,8,8,9,9,9,9
2	1,2,3,4,4
3	1,5,7,8
4	1,1,3,5
5	9

Above is a stem-and-leaf plot of ages of the members of a book club.

for above data

1. What is the minimum? _____
2. What is the maximum? _____
3. Are there any outliers? why or why not?
4. Construct a stem-and leaf plot from the data set below:

of Books read in last year: 0, 7, 13, 5, 10, 4, 11, 11, 13, 15, 17, 21, 30, 33, 41, 45, 47, 52, 60, 60, 78, 80.

5.) Given this data construct a stem-and leaf plot of the info:

- mean = 17
- mode = 7
- median = 16
- range = 30
- minimum = 6
- maximum = 36
- # of points = 10 → amount of #'s in data set

questions 6-9

4	0, 1, 2
5	5, 5, 7, 8
6	2, 4, 5, 9, 9
7	3, 4, 5, 5, 5, 7, 7
8	2, 5, 7, 8
9	1, 2, 2, 3, 5, 7, 9

Above is data set from scores on a math test.

6. What is the mean (average) score?
7. What percent scored between 73% and 85%?
8. Kelly says the range is 50, John thinks it is 59. Who is correct, explain!
9. 1 student was absent when they took the test. They scored a 93%. Find the new mean.
10. Use the following data to create a stem-and-leaf plot.

Ticket sales @ a basketball games:

59, 68, 73, 74, 87, 92, 95, 100, 101, 103, 110, 110, 112, 113, 121, 126, 127, 129.

Probability OGT

1. Bobby is playing a game with 2 spinners. The goal of the game is to spin a 7 or 8 as a total. The first spinner has 1-3 and the second has 1-8. What is the probability Bobby will win?
2. If you have a normal deck of cards and you randomly select 1, what is the probability that you will pick a red card? an ace? a spade? What is the ratio of cards from 2-10 compared to ace, jacks, queens, and kings?
3. You have 3 doors to choose from. In each, there are 3 more doors. Behind one of those doors there is a prize. What is the probability you will win a prize?
4. If you have 5 shirts, 3 pairs of pants, and 2 pairs of shoes. How many combinations are there?
5. In a black bag there are 21 marbles. 7 are blue, 6 are white, and 8 are yellow. If you remove a marble without replacing what is the probability you would pick a white then a blue?
6. You and your friends are trying to pick teams. If there are 18 names in the bag, including yours and you can't pick your name, how many

#6 continued

↓

team combinations if you are in teams of 2? 3? 6?

7. You have 400 songs on your iPod. 20 are your favorites, 10 you like, and 5 you didn't really like. What is the probability it will pick 3 of your favorites if you put it on shuffle?
8. You have 15 movies that you are considering to watch. 5 star Kristen Stewart, 5 star Johnny Depp, 4 star Jack Black, and the others star Martin Lawrence. Your friend hates Kristen Stewart and Martin. What is the probability you will randomly pick a movie your friend likes?
9. On Valentines day, you receive several notes throughout the day. You narrow down the possible candidates, you know you received notes from 5 people. If there are 17 people what is the probability you guess all 5 right. What about 3.
10. At a basketball game, you buy 3 split-the-pot tickets. If 520 people buy tickets and there are 2 prizes, what is the probability you will win at least 1.