Mr. Bondanza AP Statistics

The three sheets attached cover very basic probability ideas such as rolling a die and creating Venn diagrams. Answers to these worksheets must be uploaded onto a Google Form. The link for the form is on my TEACHER WEBPAGE not Google classroom. These answers must be submitted by **Friday August 31st**. This will be your first grade of the school year. I look forward to working with you all in September as we start our journey towards Thursday May 19th, 2019. Have a wonderful summer.

You will see some new notations in this packet. The notation of P(Jr) stands for the Probability of selecting a Junior. P stands for Probability.

Name:_____

Discrete Probability

A couple plans to have three children. Find the probability that the children are

1) all boys

2) all girls

3) exactly two boys or exactly two girls

4) at least one child of each sex.

If a single die is rolled one time, find the probabilities of getting

5) a 4

6) an even number

7) a number greater than 4

8) a number less than 7

9) a number greater than 0

10) a number greater than 3 or an odd number

11) a number greater than 3 and an odd number

A regular deck of cards, with jokers removed, has 52 cards in it. It contains 4 suits, and 13 cards of each suit.

12) What is the probability that you randomly pick out 1 card, and that card is a 10 of hearts:

13) What is the probability that you select two cards, with replacement, and both Queens:

14) What is the probability that you select two cards, without replacement, and both Queens

A survey of 200 people was taken at a local high school. Of the 200 people, 81 said they liked football, 72 said they liked basketball, and 23 said they like both. Create a Venn diagram below with the above data.

15) How many people like only football:

16) How many people like only basketball:

17) How many people like football and basketball:

18) How many people like football or basketball:

19) How many people don't like either:

In a recent survey of 25 Sun Valley students, 15 reported they liked Chicken Nuggets and 17 reported they liked Chicken Fingers, while 3 reported liking neither. MAKE SURE YOUR VENN DIAGRAM DOES NOT HAVE MORE THAN 25 PEOPLE.

Draw a Venn Diagram to illustrate the results of this survey in greater detail.

20) How many students like only Chicken Nuggets?

21) How many students like only Chicken Fingers?

22) How many students do NOT like Chicken Nuggets?

23) How many students do NOT like Chicken Fingers?

24) How many students like Chicken Nuggets and Chicken Fingers?

25) How many students like Chicken Nuggets or Chicken Fingers?

In the MIC there are 53 juniors and 32 seniors; 27 of the seniors are females, and 14 of the juniors are females. Use this information to find the probability of selecting 1 student at random.

26) P(Jr) = _____ 27) P(Sr) = _____

28) P(Male or Sr) = _____ 29) P(Male or Jr) = _____

30) P(Females and Sr) = _____ 31) P(Females and Jr) = _____

In certain math class there are 25 juniors and 23 seniors; 17 of the juniors are males, and 15 of the seniors are females. Use this information to answer the following questions.

32) P(Jr) = _____ 33) P(Sr) = _____

34) P(Male and Sr) = _____ 35) P(Male and Jr) = _____

36) P(Female or Sr) = _____ 37) P(Female or Jr) = _____