## Probability Worksheet \#6 (Compound)

Name: $\qquad$ Period: $\qquad$ Date: $\qquad$
Do the work on a separate piece of paper and show all your work. The correct answers are on at the bottom of the page

Find the probability for each problem below.

| 1. You roll a single die numbered from 1 to 6 twice. What is the probability of rolling a 6 the first time and an odd number the second? | 2. A jar contains 12 caramels, 7 mints and 16 dark chocolates. What is the probability of selecting a dark chocolate and then a caramel? |
| :---: | :---: |
| 3. The numbers 4 through 14 are placed in a bowel and drawn at random then replaced after being drawn. What is the probability of drawing the number 14 and then a number less than 12 ? | 4. In a deck of 52 playing cards, what is the probability of drawing a club and then a second club? |
| 5. The letters that form the word MISSISSIPPI are placed in a bowl. What is the probability of choosing a vowel, replacing it and then drawing a " $P$ "? | 6. In a deck of 52 playing cards, what is the probability of drawing a 3 of spades and then a 4 of spades? |
| 7. You have a jar of jelly beans in front of you with the following flavors: 12 are strawberry, 17 are blueberry, 5 are pineapple and 13 are coconut. What is the probability of selecting either a strawberry or coconut flavored jelly bean replacing it and then drawing either a blueberry or pineapple jelly bean? | 8. There are 27 students available to represent the upperclassmen at a fair. 13 are Juniors and 14 are Seniors. What is the probability that the first one chosen will be a Senior and the second one will be a Junior? |
| 9. In a deck of 52 playing cards what is the probability of drawing a card that is a picture card ( $\mathrm{A}, \mathrm{K}, \mathrm{Q}, \mathrm{J}$ ) replacing it and then drawing either a heart or a spade? | 10. There are 45 men on the roster of the football team. 3 are quarterbacks, 10 are offensive lineman, 6 are defensive lineman. 4 are running backs, 6 are linebackers, 8 are defensive backs, 1 is a kicker and the rest are receivers. What is the probability that out of two players chosen at random they would be a QB and a receiver? |
| 11. You have a jar of marbles in front of you with the following flavors: 7 are red, 12 are blue, 6 are yellow and 9 are white.. What is the probability of selecting marble that is not red, replacing it and then one that is white? | 12. There are 25 men on the roster of the baseball team. 3 are catchers, 8 are infielders, 6 are outfielders and the remainder are pitchers What is the probability that out of two players chosen at random they would be a pitcher and an infielder? |

Do the work on a separate piece of paper and show all your work. The correct answers are on at the bottom of the page
Find the probability for each problem below.

| 13. You roll a single die numbered from 1 to 6 . What is the probability of rolling a number greater than 3 and then a number less than 3 ? | 14. You have the following coins in your pocket: 5 quarters, 6 dimes, 2 nickels and 12 pennies. What is the probability you will draw a penny and then a dime? |
| :---: | :---: |
| 15. The letters that form the word ALGEBRA are placed in a bowl. What is the probability of choosing a letter other than " A " and then choosing an "A"? | 16. In a deck of 52 playing cards, what is the probability of drawing either a heart or a club than a spade or a diamond if each card is returned to the deck before drawing the next one? |
| 17. You have a jar of jelly beans in front of you with the following flavors: 12 are lime, 17 are papaya, 5 are mango and 13 are bubble gum. What is the probability of selecting either a lime or bubble gum flavored jelly bean followed by a mango jelly bean? | 18. You roll a pair of dice. What is the probability of rolling a 2 and then rolling a 7 ? |
| 19. In a deck of 52 playing cards what is the probability of drawing a picture card (A,K,Q,J) that is also a diamond followed by any picture card? | 20. On a spinner there are 10 numbers. What is the probability that the spinner will land on a 5 in two successive spins? |
| 21. You have a jar of marbles in front of you 7 are cordovan, 12 are yellow, 6 are white and 9 are red. What is the probability of selecting a marble that is not white, followed by a marble that is cordovan? | 22. In your wallet you have the following paper money: 5 singles, 2 fives, 4 tens and 6 twenties. What is the probability if you give two of the bills to the Salvation Army guy ringing the bell as you exit Wal-Mart that you will not give him a twenty? |
| 23. After shooting foul shots for 5 minutes, the player had made 25 shots out of 60 . What is the probability in the big game that if he needs to make two free throws to win the game in a row he will do so? | 24. The letters that form the word MATHEMATICS are placed in a bowl. What is the probability of choosing a letter that is a vowel followed by an " M "? |

