

Name:

Date:

Hour:

Algebra 1

WS 11.4C Independent and Dependent Events

1. A jar contains 10 marbles, 1 of which is white. What is the probability of randomly selecting two different marbles that are both white?
2. A student has a bunch of marshmallows (30 green, 40 red, 10 pink, 10 orange and 10 yellow). If she draws 5 of them at random, replacing after each draw, what is the probability that all 5 will be red?
3. A child has 30 marbles. Ten are red, 5 are purple, 5 are pink and the rest are green. What is the probability that the child will randomly choose two marbles so that the first one is red and the second one is pink?
4. I have lots of marbles in a jar: 18 white, 13 blue, 7 green, 22 red, 14 orange, 4 black and 2 white. If I randomly draw 3 marbles out of the jar, without replacement, what is the probability that all of them will be orange?
5. There are 200 packs of gum: 27 Big Red, 73 Wintergreen, 49 Juicy Fruit, 21 5 Gum, and 30 Stride. What is the probability of getting 2 Big Red (with replacement)?
6. What is the probability of choosing 3 kings, without replacement, from a set of cards with 5 kings, 5 queens, and 5 jacks?

7. There are 10 crayons: 2 blue, 3 green, 1 red, 3 orange, and 1 purple. What is the probability you will get 3 orange crayons with replacement?

8. You have a bag full of marbles – 5 red, 3 blue, 2 yellow. What is the probability of getting a red then a blue with replacement?

9. You have a bag full of marbles – 25 red, 15 blue, 35 green and 5 orange. What is the probability of getting a blue, then a red, then green, then orange without replacement?

10. There are 58 males and 4 females in a group. What is the probability of having a man line up first, then a woman?

11. I have a standard deck of 52 cards. What is the probability of randomly selecting a spade and a diamond without replacement?

12. You have a bag full of numbers from 1 – 59. What is the probability that you randomly select a 3 and then 29, with replacement?

13. You are at an animal shelter and there are 20 dogs and 11 cats. What is the probability you select a dog and a cat?