Unit 6 Day 4 CW

Directions: Circle the type of event for each question and then find the probability in the space provided.

1. Kenya is trying to find matching socks. There are 4 red socks, 6 blue socks, and 2 white socks in her drawer. What is the probability that Kenya will pull out a blue sock, put it on, and then pull out another blue sock to put on?	Simple Independent Dependent Solution:
2. What is the probability of rolling a 4 on a number cube?	Simple Independent Dependent Solution:
3. What is the probability of pulling the letter "s" out of the word Mississippi?	Simple Independent Dependent Solution:
4. Your favorite flavor of gum is green apple. The gumball machine contains 10 grape gumballs, 12 strawberry gumballs, 3 lemon gumballs, and 10 green apple gumballs. What is the probability that you will ***not*** get your favorite gumball from the machine?	Simple Independent Dependent Solution:
5. What is the probability of rolling a 4 on a number cube and pulling a red marble out of a bag that contains 3 red, 2 black, and 5 yellow marbles?	Simple Independent Dependent Solution:
6. A deck of playing cards contains 52 cards. What is the probability of pulling out a King of Diamonds and without replacing it, then an Ace of Spades?	Simple Independent Dependent Solution:
7. Diamond is playing a game. In the game she has to spin a spinner that is divided into equal sections of orange, red, purple, and pink. What is the probability that on her first spin she will land on pink and then red on her second spin?	Simple Independent Dependent Solution:
8. Numbers 1 to 20 are placed in a bag. Without replacing the first number, what is the probability that the first number drawn will be odd and the second one will be even?	Simple Independent Dependent Solution:

9. On a shelf there are 60 novels and 20 poetry books. What is the probability that Person A chooses a novel and walks away with it and then Person B walks up shortly after and picks another novel?	Simple Independent Dependent Solution:
10. In a classroom there are 100 students, of whom 40 are boys, 30 of the 100 students wear glasses, and 15 are boys who wear glasses. If one student from the class is randomly selected what is the probability that the student will be a girl who does not wear glasses?	Simple Independent Dependent Solution:
11. Two cards are drawn from a single deck of 52 cards one after the other. If the first card is not replaced, find the probability of selecting a king on the first draw and a queen on the second draw?	Simple Independent Dependent Solution:
12. 10 cards are numbered from 1 through 10. The cards are drawn at random. If two cards are drawn with replacement, find the probability of choosing a prime number in both the first and the second draw.	Simple Independent Dependent Solution:
13. What is the probability of getting a 7 after rolling a single number cube numbered 1 to 6?	Simple Independent Dependent Solution:
14. What is the probability of landing on heads when tossing a coin and then rolling a 6 when rolling a number cube?	Simple Independent Dependent Solution:
15. What is the probability of landing on heads when tossing a coin?	Simple Independent Dependent Solution:

Unit 6 Day 4 HW

1. What is the sample space of tossing a coin and spinning a spinner with colors red, blue, yellow and green?

2. In question 1, what is the probability that you will flip heads and spin yellow?

3. What is the probability of picking a spade from a deck of cards, replacing it, then picking an ace?

4. What is the probability of being dealt a hand of 3 cards that are all red?

5. What is the probability that you will pick a heart or a face card from a standard deck of cards?

6. How many outcomes are possible when flipping a coin, tossing a die and picking a card from a standard deck of cards?

7. What is the probability of picking a boy in our class or picking someone with blonde hair?

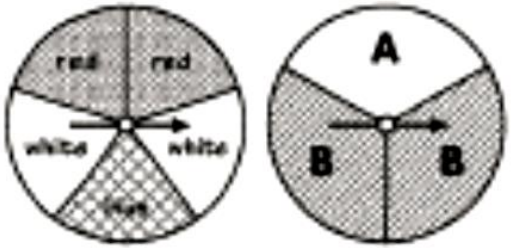
8. There are 18 blue marbles, 2 green marbles and 10 yellow marbles in a bag. What is the probability of picking a green or blue marble?

9. There are 18 blue marbles, 2 green marbles and 10 yellow marbles in a bag. What is the probability of picking a blue marble three times in a row without replacing the marble each time?

Why Did the Actor Jump Out Of a Window In Times Square?

Find each answer in the set of answers under the exercise. Write the exercise letter in that box.

1 **Find each probability if you spin both spinners.**



T. P(blue, A)

A. P(not red, A)

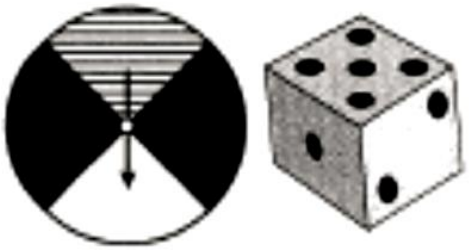
E. P(red, A)

E. P(not white, B)

O. P(white, B)

D. P(not blue, B)

2 **Find each probability if you spin the spinner and roll the die.**



A. P(white, 2)

T. P(striped, less than 5)

H. P(black, 6)

K. P(not striped, odd)

E. P(white, even)

W. P(green, odd)

3 **Solve.**

M. Suppose the probability that a new spark plug is defective is $\frac{1}{24}$. And suppose you buy two new spark plugs for a motorcycle. What is the probability that both of them are defective?

N. A test includes several multiple choice questions, each with five choices. Suppose you don't know the answers for three of these questions, so you guess. What is the probability of getting all three correct?

$\frac{1}{12}$	$\frac{2}{15}$	$\frac{1}{496}$	0	$\frac{1}{5}$	$\frac{1}{125}$	$\frac{1}{15}$	$\frac{1}{8}$	$\frac{8}{15}$	$\frac{1}{75}$	$\frac{1}{6}$	$\frac{4}{15}$	$\frac{5}{8}$	$\frac{1}{576}$	$\frac{1}{24}$	$\frac{3}{8}$	$\frac{2}{5}$

4 **"ARKANSAS": Find each probability if you pick a card, do NOT replace it, then pick a second card.**

O. P(N, then K)

B. P(S, then A)

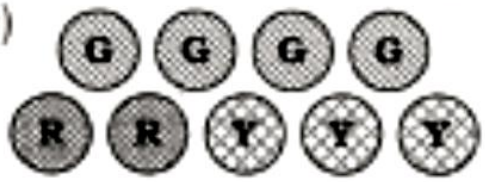
A. P(R, then S)

Y. P(S, then not S)

I. P(A, then N)

A. P(A, then not A)

5 **Find each probability if you pick two marbles without replacing the first (G = green; R = red; Y = yellow).**



O. P(red, then green)

N. P(yellow, then not yellow)

A. P(red, then yellow)

T. P(green, then not green)

W. P(green, then green)

D. P(not red, then not red)

6 **Solve.**

H. Two students are chosen at random from a class of 30. What is the probability that both you and your best friend are chosen?

R. Two cards are drawn at random from a standard deck of 52 cards. What is the probability that both cards are aces?

$\frac{1}{12}$	$\frac{7}{18}$	$\frac{1}{435}$	$\frac{3}{56}$	$\frac{5}{18}$	$\frac{2}{869}$	$\frac{1}{56}$	$\frac{1}{4}$	$\frac{3}{220}$	$\frac{3}{28}$	$\frac{1}{221}$	$\frac{1}{9}$	$\frac{15}{56}$	$\frac{7}{12}$	$\frac{1}{6}$	$\frac{1}{28}$	$\frac{3}{14}$