NAME_____

Compound Events:
Powerpoint Notes Sheet

Compound Events:

Independent Events:

Examples
#1:

#2:

#3:

Dependent Events:

Examples:
#1:

#2:

#3:

Integrated 2

Name_____

Independent vs. Dependent
Compound Events

Find the following probabilities and determine if the events are independent or dependent.

1. You roll a fair 6-sided die and then draw one card from a standard deck of cards. What is the probability of getting a 2 on the die and drawing a heart?

   Probability = _____ Independent Dependent

2. You have 3 pairs of red socks, 2 pairs of green socks and 7 pairs of white socks. What is the probability of pulling out one red pair and then pulling out one white pair (without replacement)?

   Probability = _____ Independent Dependent

3. You have 3 pairs of red socks, 2 pairs of green socks and 7 pairs of white socks. What is the probability of pulling out one red pair and then pulling out one white pair (with replacement)?

   Probability = _____ Independent Dependent

4. You are a 9/10 free throw shooter. You are at the free throw line shooting two free throws. What is the probability that you will make both free throws?

   Probability = _____ Independent Dependent

5. You are picking numbers for the lottery, the daily 3. You may choose any number from 0 - 9. There is a separate set of 10 numbered balls for each of the three digits you may choose. What is the probability of matching all three numbers?

   Probability = _____ Independent Dependent

6. In Illinois, the daily 3 is different. They do not have a different set of numbered balls for each digit. They have one set of numbered balls, and they do not replace a ball once it has been selected. What is the probability of matching all three numbers in Illinois?

Probability = _____ Independent Dependent

7. You draw three cards from a standard deck of playing cards and do NOT replace them after each draw. What is the probability of drawing a 3, then a queen, and then an ace?

Probability = _____ Independent Dependent

8. You draw three cards from a standard deck of playing cards and do NOT replace them after each draw. What is the probability of drawing the 6 of hearts, then any heart, and then a black jack?

Probability = _____ Independent Dependent

9. You draw three cards from a standard deck of playing cards and replace each card back into the deck after each draw. What is the probability of drawing all 3 cards that are spades?

Probability = _____ Independent Dependent

10. You and your friend are dress shopping for the winter dance. You tried on three white dresses, two red dresses, a green dress and a blue dress. Your friend tried on two black dresses, a red dress, a white dress, and a yellow dress. What is the probability that you both chose a white dress?

Probability = _____ Independent Dependent

Name _____ Class _____ Date _____

Practice 12-5 Independent and Dependent Events

Practice

A shelf holds 3 novels, 2 biographies, and 1 history book. Two students in turn choose a book at random. What is the probability that the students choose each of the following?

1. both novels _____
2. both biographies _____
3. a history, then a novel _____
4. both history books _____

Meg flipped a penny the given number of times. What is the probability the results were as follows?

5. 2; two heads _____
6. 3; three tails _____
7. 2; a tail, then a head _____
8. 5; five tails _____

Two puppies are chosen at random from a box at the mall. What is the probability of these outcomes?

Free Puppies for Adoption!
5 black retrievers
3 brown hounds
4 black setters

9. both black _____
10. both brown _____
11. a setter, then a hound _____
12. a retriever, then a setter _____
13. both setters _____

Are the events independent or dependent? Explain.

14. A guest at a party takes a sandwich from a tray. A second guest then takes a sandwich.

_____

_____

15. Sam flips a coin and gets heads. He flips again and gets tails.

_____

You can select only two cards from the right. Find the probability of selecting a T and an N for each condition.

M	A	T	H
I	S		
F	U	N	

16. You replace the first card before drawing the second.

_____

17. You do not replace the first card before drawing the second.

_____